



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

6-140389

To the President of the Senate and the
Speaker of the House of Representatives

The accompanying report summarizes our findings on the need for the Department of Defense to improve its controls over Government-owned property in contractors' plants,

On the basis of our review, we believe that there is a need to improve the system of property controls over Government-owned facilities, special tooling, and material in the possession of contractors. Generally, our review disclosed weaknesses with regard to effective use of industrial plant equipment, rental arrangements, and accounting for and control of special tooling and material. Further, we found that certain aspects of the work of Government property administrators and internal auditors were in need of improvement,

Our findings and recommendations, together with the related corrective measures taken or promised by the Department of Defense, are summarized on pages 3 through 8 in the highlights section of the report,

In our cooperative efforts, we informed Defense officials, both at local and departmental levels, of the weaknesses observed in our review at the earliest practicable time and we participated in a series of meetings with departmental officials, at which time we discussed the need for the various improvements to property control systems discussed in the report. Although we have discussed the details of our findings with the contractors and universities involved, we did not obtain their written comments regarding the contents of this report,

This report is being issued so that the Congress may be informed of the actions taken, or under consideration, and the additional steps which we feel the Department of Defense must take to improve the administration and control over Government-owned property in the possession of contractors,

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REPORT ON
NEED FOR IMPROVEMENTS IN CONTROLS OVER
GOVERNMENT-OWNED PROPERTY IN CONTRACTORS' PLANTS
DEPARTMENT OF DEFENSE

INTRODUCTION

The General Accounting Office has made a review of the adequacy of controls over Government-owned property in the possession of contractors. The review was performed pursuant to recommendations made by the former Subcommittee on Federal Procurement and Regulation (now the Subcommittee on Economy in Government), Joint Economic Committee, in its May 1966 report on the "Economic Impact of Federal Procurement." The review was also made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), the Accounting and Auditing Act of 1950 (31 U.S.C. 67), and the authority of the Comptroller General to examine contractors' records, as set forth in contract clauses prescribed by the United States Code (10 U.S.C. 2313(b)).

In performing our review, we visited:

1. Various offices of the Department of Defense (DOD) at the Assistant Secretary of Defense level and at the military department headquarters and field levels,
2. The headquarters of the Defense Industrial Plant Equipment Center (DIPEC),
3. The headquarters and some field agencies of the Defense Contract Administration Services, and
4. The plants of 21 defense contractors and the campuses of two universities.

Government-owned property in the possession of 17 of the 21 defense contractors we visited and the two universities had an acquisition cost of about \$944 million; comparable data were not obtained at four contractor locations. The contractor locations at which we made our reviews were selected impartially except that selections were limited to contractors which, according to available preliminary information, had Government property in their possession. We included contractors which had large, moderate, or small amounts of Government-owned property in their possession. The contractors selected are engaged in a variety of defense work; e.g., airframe, aircraft engine, electronics, and ordnance. Our selection included both large and small prime contractors and subcontractors.

The contractor locations selected for our review included 15 plants under the administrative cognizance of the Defense Contract Administration Services (DCAS), a component of the Defense Supply Agency (DSA). The other six plants were under the administrative cognizance of the military

services. Government property we reviewed at the two universities was administered by the Office of Naval Research (ONR).

We examined DOD policies and implementing military service and DCAS regulations relating to the administration of Government-owned property. We did not examine into all aspects of property management; however, we selected **for** evaluation those policies which appeared, from our preliminary inquiries, to warrant particular attention. Further, we reviewed pertinent audit reports, agency management reports, workpapers generated by the property administrator, DIPEC records, and the contractors' written procedures and related records. ~~We~~ reviewed records of utilization of Government-owned property maintained by the contractor to assist us in examining into the adequacy of the bases used in arriving at rentals due the Government, and the extent to which such property was being utilized.

DOD has issued instructions to place the subject of contractors' liability for **loss** of, or damage to, Government-owned property in their possession before the Armed Services Procurement Regulation (ASPR) Committee for study. Therefore, this subject was not covered in our review, but it will be considered when the Department's study has been completed.

A draft report of our findings was submitted to the Secretary of Defense in ~~May~~ 1967 for comment. In our draft report we made a series of proposals to improve the administration and control over Government-owned property. By letter dated August 7, 1967, the Deputy Assistant Secretary of Defense (Procurement) commented on our proposals. (See app. I.)

Although we have discussed the details of our findings with the contractors and universities involved, we did not obtain their written comments regarding the contents of this report.

The principal officials of the Department of Defense, the military departments, and the Office of Emergency Planning responsible for the administration of the activities discussed in this report are listed in appendix 11. Appendix III lists the approximate cost of the Government-owned property at the contractor locations visited.

B- 140389

Copies of this report are being **sent** to the Director, Bureau of the Budget; Director, Office of Emergency Planning; Secretary of Defense; Secretary of **the** Army; Secretary **of** the Navy; **and** Secretary of the Air Force.

A handwritten signature in cursive script, reading "James B. Acheson".

Comptroller General
of **the** United States

HIGHLIGHTS

On the basis of our review, we believe that there is a need for the Department of Defense to improve its system of controls over Government-owned facilities, special tooling, and material in the possession of contractors.

Greater adherence by responsible agency officials to the prescribed Department of Defense regulations governing industrial plant equipment (IPE) in the possession of contractors as well as certain revisions to the current regulations are necessary to ensure that maximum benefits accrue to the Government from its sizable investment in these facilities.

The need for these improvements is pointed up by our findings that:

1. Some of the equipment is being used by contractors in their commercial operations without appropriate Government approval and without equitable compensation to the Government.
2. There is little or no use for extended periods of a substantial portion of the equipment, for some of which there is a current need in other plants.
3. Utilization data maintained by some contractors are not adequate to indicate the extent and manner of use.
4. DIPEC, the office responsible for the management of idle IPE, frequently permitted the purchase of equipment to fill requisitions although the requested equipment was idle and available at other locations.
5. Rental policies, in some cases, were inimical to the Government's interests.
6. In some cases, the Government's interests might better be served by foregoing replacing outworn or outmoded equipment in favor of the contractors' acquiring the replacement at its own expense.

Special tooling, including special test equipment, in the possession of contractors represents a significant investment by the Government. Although the Government does not require contractors to report the value of such property in their possession, the estimated cost of this class of property at the contractors' plants we visited amounted to more than \$347 million, or over one third of the cost of Government property in the possession of those contractors.

We found weaknesses in the control of this property due to deficiencies in inventory practices, the absence of financial controls, and the absence of a requirement for surveillance by Government property administrators of special tooling in the possession of subcontractors. Also, in some instances, Government-owned tooling was not identified as Government property or in the property records.

Some tooling is usable for many years. Also, the adaptability of much of this tooling to commercial purposes indicates the need for financial control over such property. Further, it seems necessary for tooling and test equipment to be properly classified, identified, and accounted for to prevent unauthorized use and unrecognized loss and to provide information to facilitate intelligent decision making in regard to acquisitions, dispositions, rentals, and transfers.

We found that accounting systems employed by contractors did not provide for financial control, and in most instances acceptable physical inventories of Government-owned material were not being taken properly. We attribute these weaknesses to indefinite instructions existing in the ASPR, deficient physical inventory taking, and departure from good property management practices.

Financial control accounts are not required by the ASPR to be maintained by nonprofit institutions for IPE and special test equipment, nor were they being maintained by the two universities we visited. We found that periodic inventories were not required by the ASPR nor were they taken by the universities, even though research contracts frequently are in process for several years. Physical inventories are generally taken only upon completion of a contract. In those instances where physical inventories were taken at contract completion, we found that the procedures employed did not provide necessary internal control.

The ASPR provides for the contractor's property accounting system to be submitted to the property administrator for approval. The Regulation also requires that the property administrator periodically test the contractor's system to ensure that adequate control exists over Government-owned property.

We found that the value of the approval process of the contractor's property accounting system by Government property administrators as a means to ensure adequate control over Government-owned property was questionable because contractor systems were allowed to continue in an approved status even though the property administrator had found significant weaknesses.

We also found that relatively few internal audits have been made of the effectiveness of property administration at contractors' plants. Audits that were made regarding the adequacy of rental payments were not sufficiently comprehensive to be fully effective. Generally, the reviews were limited to (1) verifying the accuracy of data in the computations submitted by the contractor and (2) determining whether the procedure for computing the rent was in accordance with the terms of the lease. An evaluation as to whether the prevailing terms of the lease were equitable to the Government was not apparent.

In our draft report to the Secretary of Defense, we made a number of proposals to improve the administration over Government-owned property. In general, we have found agency management receptive to our suggestions. Actions have been taken or planned in response to most of our proposals

which, if properly implemented, should result in significant improvements in the control and utilization of such property.

The Department of Defense, however, did not fully agree with, or did not indicate any specific corrective action on, our proposals to (1) require contractors to furnish machine-by-machine utilization data and to obtain prior Office of Emergency Planning approval on an item-by-item basis for the commercial use of industrial plant equipment and (2) strengthen the controls over special tooling and special test equipment through the use of financial accounting controls. We believe that implementation of these proposals or of other acceptable alternatives is necessary to effectively administer this property. Therefore, we are recommending to the Secretary of Defense that he reconsider the Department's position on these matters.

We are also recommending to the Director, Office of Emergency Planning, that prior approvals for planned commercial use of IPE be administered on a machine-by-machine basis.

Following is a tabulation of our major findings and actions taken or under consideration by the Department of Defense to implement improvements needed. The tabulation also sets forth our recommendations for added controls or for strengthening the Department's existing or proposed controls over Government-owned property.

Summary of Major Findings and Actions Taken or Under Consideration
by the Department of Defense to Implement Improvements Needed and
General Accounting Office Recommendations for Added Controls or for Strengthening the
Department's Existing or Proposed Controls Over Government-owned Property

<u>Findings</u>	<u>Actions taken or under consideration by the Department of Defense</u>	<u>Recommendations by the General Accounting Office</u>
<u>FACILITIES</u>		
1. <u>Utilization</u> --Many items of Government-owned industrial plant equipment were being retained which, in our opinion, should have been reported as excess because they were not used, were being used very little, or were being used extensively for commercial work. In the case of high commercial use, we found that generally the required prior approvals for such use had not been obtained from the Office of Emergency Planning. We believe that such use was not always in the best interest of the Government since the circumstances sometimes indicated that the most efficient IPE was not being used to process Government work. For example, about 1 year after an 8,000-ton forge press costing \$1.4 million was installed, it was used extensively for commercial production of jet engine midspan blades. In the 3-year period ended December 31, 1965, the 8,000-ton press was used 78 percent of actual production time for commercial work while the majority of Government procurement of midspan blades was processed on older 4,000-ton presses.	ASFR is being revised to prescribe that the contractor be required contractually to establish and maintain a written system for controlling IPE, and property system surveys will be conducted to ensure the system's effectiveness and to show the extent and manner of its use. Also a feasibility study will be made regarding maintenance of utilization records on a machine-by-machine basis; for example, IPE of selected high value.	We are recommending to the Secretary of Defense that use data of IPE be compiled on a machine-by-machine basis to the extent feasible and that this basis be emphasized in the study which WD will perform regarding the feasibility of maintaining utilization records. (See p. 23.) We are recommending to the Director, Office of Emergency Planning, that prior approvals for planned commercial use of IPE be similarly administered. (See p. 23.)
2. <u>Redistribution</u> --On the basis of the results of a statistical sample, we estimate that during a 6-month period, IPE with a value of approximately \$12 million could have been offered by DIPEC to fill requisitions for IPE which it stated was unavailable from its inventory.	DIPEC has established a training program for all commodity managers with particular emphasis placed on the requirement to document specific conditions under which items in inventory are rejected as being unsuitable for the intended use.	None
3. <u>Rent</u> --We found that the various bases upon which the rent payments were negotiated resulted in a lack of uniformity in the rates actually charged, inequities between contractors; and, in some cases, a reduction in the rent payments to the Government. We found that the determination of rent on a machine-by-machine basis and similarly applying the rent credit for Government rent-free use to each machine above an established value in its ratio of Government versus commercial machine hours of use would be more accurate and more equitable. At one contractor's plant the rent payment would have increased from \$226,400 to \$809,000 for the year ended September 30, 1966, under such a procedure.	Several alternative proposals for administering rent are under consideration by the ASFR Committee; none of the proposals contemplate a determination of actual equipment used on a machine-by-machine basis.	We are recommending to the Secretary of Defense that the ASFR Committee closely examine the feasibility of computing rent on a machine-by-machine basis and similarly applying the rent credit for Government rent-free use to each machine above an established dollar value in its ratio of Government versus commercial hours of use. (See p. 31.)
4. <u>Rental, heavy presses</u> --The current policy of charging rent for both Government and commercial work, at a rate of 4 percent of sales, may not be in the best interest of the Government since the overall use of the presses has significantly increased and significant amounts of commercial sales are now being processed through the presses. We found that the rental arrangements were yielding only 1 to 2 percent annual return on the Government's investment in the heavy presses.	DOD, in conjunction with the Air Force, is reexamining existing arrangements pertaining to rental charges for the heavy presses. Also, DOD is considering such aspects as waiving the rental charges for Government work, increasing rental returns on commercial work, and the feasibility of selling some of the presses to Defense contractors.	None
5. <u>Modernization</u> --The DOD program for replacement of Government-owned machine tools as presently administered will, in our opinion, tend to perpetuate the large Government investment in general purpose machine tools in possession of contractors and thus defer indefinitely the time when contractors would furnish all facilities in accordance with DOD basic policy. We found instances where contractors had not been encouraged, as prescribed by WD policy, to privately finance the purchases of new machines and other instances where the approvals to provide new Government-furnished machines had been based on inaccurate information. For example, an approved modernization program	Guidelines to improve the administration of the modernization program will be revised, where applicable, and improvements will be made where existing guidelines are deemed adequate consistent with the improvements needed and cited.	None

for one contractor included four gear-making machines estimated to cost \$232,100 based upon repaying the investment through reduced operating costs within 3 to 4 years. To do this the initial year's use would have had to increase eight times over present levels. As of September 1966 the contractor had no active requisitions for additional gear machine operators; moreover, one of the replaced machines had been used exclusively for commercial production. In addition, DOD procedures did not include a contractual provision for recovery by the Government of all savings resulting from use of the modern and more efficient Government-furnished machines.

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|--|---|------|
| 6. Other--At same contractor location; we noted that the cost of installation and/or transportation associated with the acquisition of IPE was not identified and recorded as prescribed by the accounting principles and standards of the Comptroller General. Also, we found that the Navy was unnecessarily maintaining records of its IFE which were a duplication of those maintained by contractors and DIPEC. | 1. A study of the most feasible way of obtaining and recording IFE transportation and installation cost data will be made to ensure compliance with this requirement. | None |
| | 2. Duplicate recordkeeping is being discontinued and ASFR is being revised to prevent such duplications in all other Defense agencies. | None |

OTHER CATEGORIES

- | | | |
|--|--|--|
| 1. <u>Special tooling and special test equipment</u> --We found weaknesses in the control of this property due to deficiencies in inventory practices, classification, the absence of financial control, and the absence of a requirement for surveillance by Government property administrators of special tooling in the possession of sub-contractors. Also, in some instances, Government-owned tooling, as prescribed by the Armed Services Procurement Regulation, was not identifiable by physical markings or in the property records. At one plant, Government-owned tooling acquired under supply contracts at an estimated cost of \$55 million, starting in 1952, was not controlled under a system of monetary control accounts, had never been inventoried, and lacked proper identification in the stock records. | DOD agrees that proper internal control includes segregation of duties of responsible contractor personnel taking physical inventories of Government property and DOD will review ASFR to determine if a procedural revision is necessary. However, DOD felt that the present manner of administering and controlling special tooling, as prescribed in the ASFR, was adequate and it planned no study project with regard to determining the point in the contracting process at which financial control of special tooling should be maintained. | We are recommending to the Secretary of Defense that the Department of Defense establish a study project to determine the procedures to be used and the point in the contracting process at which financial control of special tooling should be maintained. (See p. 55.) We are recommending also that periodic examination and identification be made of special tooling to identify multiluse characteristics and that the items identified be reclassified and controlled as facility-type items. (See p. 55). |
| 2. <u>Material</u> --We found that accounting systems employed by contractors did not provide for financial control and, in most instances, acceptable physical inventories of Government-owned material were not being properly taken. We attribute the weaknesses to indefinite instructions existing in the ASFR, deficient physical inventory taking, and departure from good property management practices. | Financial controls for material have been the subject of study for many years, and these studies are being continued. DOD agrees that proper internal control includes segregation of duties of responsible contractor personnel taking physical inventories of Government property, and DOD will review ASFR to determine if a procedural revision is necessary. | We are recommending to the Secretary of Defense that ASFR B-304.7 be amended to require financial accounting control for Government-owned material in the possession of contractors. (See p. 56). |
| 3. <u>Nonprofit institutions</u> --Our review of property at two universities revealed that financial controls were not maintained by the universities and that at one university this resulted in the loss of monetary and quantitative control over at least \$52,000 in Government IPE. We also found that periodic inventories were not required by the ASFR, nor were they taken by the universities even though research contracts frequently are in process for several years. When inventories were taken, the procedures employed did not provide necessary internal control. | 1. DOD feels that financial control accounts for IPE at colleges and universities are currently required by the ASFR and it will take necessary steps to ensure compliance.

2. A revision to DSA regulations and ASFR will be processed to require IPE costing over \$1,000, at colleges and universities, to be reported to DIPEC for management and control purposes, and IPE of this type will be screened for utilization prior to its donation under provisions of the United States Code (42 U.S.C. 1892).

3. DOD agrees that proper internal control includes segregation of duties of responsible contractor personnel taking physical inventories of Government property, and WD will review ASFR to determine if a procedural revision is necessary. | We are recommending to the Secretary of Defense that the ASFR be revised to clearly establish the need for monetary control accounts for IPE. We are further recommending that standard IPE, now classified as special test equipment, be reclassified and controlled as facility-type items. Also, we are recommending that special test equipment be accounted for under monetary control accounts. (See p. 63). |

Further, we found that ASFR requirements were not being adhered to with regard to control of property by DIPEC. As a result (1) IPE, at a cost of about \$260,400, was purchased in fiscal year 1966 without first screening DIPEC inventories to determine whether acceptable IPE was on hand and available, (2) DIPEC's central inventory files were incomplete because \$1.1 million worth of IPE on hand at the universities was not reported to DIPEC, and (3) during fiscal year 1965 and 1966, IPE in critical or short supply having a cost of \$104,700 was donated to the universities without screening DIPEC to determine whether the equipment was needed elsewhere in the Government.

4. Property management function in the DOD--
 We found that the value of the approval process of the contractor's property accounting system by Government property administrators as a means to ensure adequate control over Government-owned property was questionable because (1) there was little incentive for the contractor to maintain an approved system and (2) contractor systems were allowed to continue in an approved status even though the property administrator had found significant weaknesses in the contractor's control over property which were not subsequently corrected, or when other weaknesses were, in our opinion, apparent and should have been corrected.
1. A specific ASPR requirement is being considered which will require annual reviews of contractor and nonprofit institution accounting systems. None
2. A joint study project had been established with the Civil Service Commission to evaluate the current position classification standards for property administrators. None
3. WD indicated that scheduled or planned internal audits by agencies and military departments should deliver necessary audit coverage of property administration. None

We also found that for the past 1-1/2 years relatively few internal audits had been made of the effectiveness of property administration at contractors' plants. Further, we found that audits that were made regarding the adequacy of rental payments were, in our opinion, not sufficiently comprehensive to be fully effective.

BACKGROUND

This review was undertaken at the direction of the former Subcommittee on Federal Procurement and Regulation (now the Subcommittee on Economy in Government), Joint Economic Committee, in its May 1966 report on "Economic Impact of Federal Procurement." Among the recommendations the Subcommittee included in its report were (1) that the General Accounting Office cooperate with DOD in the development of an adequate contractor inventory accounting system and approve the system when found to be adequate and (2) that a thorough review also be made of any misuse or unauthorized use of Government property in the hands of contractors and proper settlement be made as soon as possible.

The Government's inventory of property in the hands of contractors consists of property which the Government has furnished and property procured or otherwise provided by contractors for the account of the Government. Basic policies governing the control of this property are set forth in the ASPR. As prescribed in this Regulation, there are five classes of Government property.

Facilities--This term refers to industrial property for production, maintenance, research, development, or test, including real property and rights therein, buildings, structures, improvements, and plant equipment. Plant equipment includes personal property, such as furniture, machinery, equipment, machine tools, and accessory and auxiliary items, which is used or capable of being used in the manufacture of supplies or in the performance of services. DOD records show that as of June 30, 1966, the cost of facilities in the hands of contractors was \$6.2 billion.

Special tooling--This is defined as being all jigs, dies, fixtures, molds, patterns, taps, gages, other equipment and manufacturing aids, and replacements thereof, which are of such a specialized nature that, without substantial modification or alteration, their use is limited to the development or production of particular supplies or parts thereof or the performance of particular services.¹

Special test equipment--This means electrical, electronic, hydraulic, pneumatic, mechanical, or other items or assemblies of equipment, which are of such a specialized nature that, without modification or alteration, the use of the items (if they are to be used separately) or assemblies is limited to testing in the development or production of particular supplies or parts thereof or in the performance of particular services.¹

Material--This class includes all property which may be incorporated into or attached to an end-item to be delivered under a contract or which may be consumed or expended in the performance of a contract. DOD records show that as of June 30, 1966, the cost of material in the hands of contractors was at least \$4.7 billion.

¹DOD does not collect financial data regarding the value of this class of property.

Military property--This class consists of military personal property, such as an airplane, which is provided to the contractor to assist in performing a contract but which is not consumed or incorporated in the end-items produced.¹

In our report we make extensive reference to a type of facility referred to as IPE. The term is not specifically defined by the ASPR. However, DIPEC, a component of DSA, defines IPE as severable, general-purpose equipment used to develop, produce, maintain, and test defense material. The four major groupings of this equipment are test, metalworking, electrical and electronics, and general equipment.

The responsibility for the administration of Government-owned property in the possession of DOD contractors was vested in the property administrators of the military services until the establishment of DCAS in September 1964. Since that time, DCAS has expanded to include 11 regions and over 23,000 personnel, approximately 450 of which are property administrators. DCAS has cognizance over the administration of Government-owned property at about 5,000 contractors' plants. The individual military services have retained cognizance at 508 plants, 48 of which were major weapon systems plants.

In 1966 the Office of the Secretary of Defense (OSD), Installations and Logistics (I&L), designated ONR as the cognizant activity for field contract administration of DOD contracts with educational institutions numbering 293 as of October 1966.

DIPEC is responsible for management of idle IPE which has a unit acquisition cost of \$1,000 or more. DIPEC controls the allocation and reutilization of such equipment and also maintains records of much of the IPE in active use and in mobilization packages controlled by the military departments and DSA. As of June 30, 1966, DIPEC's records showed that DOD components had reported approximately \$3.6 billion worth of IPE. We were told that the average age of DIPEC-controlled IPE is slightly over 13 years.

Some of the current policies governing the administration of Government-owned property are contained in the following instructions:

1. DOD Directive 4275.5 dated March 13, 1964, and the superseding directive dated November 14, 1966, establishes policy on acquisition and management of industrial facilities.
2. ASPR sets forth specific policies with respect to providing property for use by contractors, clauses for inclusion in contracts, and the bases for determining rental charges for the use of Government-owned property. Appendixes B and C of ASPR set forth the basic requirements to be observed by military departments for establishing and maintaining control over Government property in the possession of contractors and nonprofit research and development contractors.

¹DOD does not collect financial data regarding the value of this class of property.

- 3, Title 2, General Accounting Office Policy and Procedures Manual for Guidance of Federal Agencies, contains the accounting principles and standards prescribed by the Comptroller General of the United States to be observed by each executive agency.

It is the policy of DOD to have its contractors maintain the official records of Government-owned property in their possession. The Department holds the contractor accountable for this property until an agent of the Government relieves the contractor of further responsibility for the property. The Department requires that a property administrator be designated for each contract involving Government property. The designated property administrator, who is responsible to the contract administrator, is a key Government employee with respect to the control over Government-owned property. His more significant duties include the responsibility for:

1. Reviewing and approving the contractor's property accounting system.
2. Examining documents to the extent necessary to establish the correctness and completeness of the contractor's property records.
3. Determining whether the contractor is reasonably using the property.
4. Furnishing management data required by the military services,

In addition to the property administrator, other Government specialists are charged with certain responsibilities regarding administration of property. For example, at some contractors' plants an industrial specialist is required to examine contractor proposals for additional Government facilities and to determine the contractor's need for retaining Government-owned property. The methods to be followed in achieving the policy objectives are discussed in the instructions issued by each of the military services.

The Office of Emergency Planning (OEP) provides planning guidance, coordination, and review on behalf of the President. In November 1963, OEP issued Defense Mobilization Order 8555.1 establishing policy guidance on Government-owned production equipment. This Order consolidated and revised then existing policies on Government-owned production equipment, including machine tools.

FINDINGS AND RECOMMENDATIONS

FACILITIES

Utilization of industrial plant equipment

Substantial improvements needed in utilization of IPE

Our review of IPE in the possession of contractors showed that many items were being retained which, in our opinion, should have been reported as excess and available for utilization elsewhere within the DOD. We concluded that this condition was attributable primarily to inadequacies in Government procedures for administration of property. Definitive guidelines had not been provided for determining at what usage level IPE should be declared excess; for requiring that such determinations be made periodically; nor for requiring contractors to prepare and furnish utilization data for Government property officials to use as a tool of property management for controlling the use of IPE.

Our review also indicated that: items of IPE which had been reported as idle and available for reutilization were not, in all cases, offered to fill requisitions received for metalworking and general plant equipment.

Further, we found that generally prior approval had not been obtained, although prescribed, for the use of IPE for non-Government purposes. It is our opinion that Government property was improperly being used in a significant number of such cases.

At the contractor locations visited, we questioned retention by the contractor of 328 items of IPE costing an estimated \$15.9 million because (1) it had not been used over an extended period of time, (2) it had been used solely or predominantly for commercial work, or (3) the usage was low--below the level indicated as acceptable by the DOD. For the most part, our determinations were based on utilization data supplied by those contractors maintaining utilization records for the purpose of calculating rent payments due the Government for use of the equipment on commercial and certain Government work. We were unable to determine the manner of use of many items of equipment at a number of the contractor plants we visited because such utilization records were not maintained.

We were also restricted in our determination of need for 32 items of IPE that we had questioned at one contractor location because the need was based on estimates of expected use rather than on actual use. The balance of the items questioned, 296 items, were estimated to have cost \$9.4 million.

We compared these items to incoming requisitions for IPE which DIPEC had been unable to fill during the same period of time for which we were questioning their retention by the contractors. Engineering and technical personnel at DIPEC advised us that, of the 296 items, they considered 47 to be "interchangeable" and "substitutable" with items requisitioned and that, in their judgment, the items would have been satisfactory to fill

the requisitions for items which had been designated as unavailable to the requesting DOD component. Moreover, DIPEC records revealed that 81 of the 296 items of IPE were classed as being in either critical or short supply.

Our bases for questioning the 328 items are discussed in the following sections.

On the basis of our reviews of such records as were available, we believe that many other items would have reflected similar patterns of poor usage if records had been maintained to permit their identification.

IPE not in use--DOD Directive 4275 dated March 13, 1964, and the superseding directive dated November 14, 1966, state that Government-owned facilities will be declared excess as soon as they become excess to the missions for which they were required.

We questioned retention of 133 items of IPE, estimated to cost \$3.3 million, which had not been in use for extended periods of time. On the basis of our review of utilization surveys conducted by Government property officials, we concluded that in many cases undue reliance had been placed on the prospect of future production creating valid needs or desirable utilization levels for the IPE reviewed as illustrated below,

At one contractor plant we identified 74 items of equipment (estimated to have cost \$1.1 million) such as screw machines, presses, lathes, and drilling machines which had not been used the first 9 months of 1966. The contractor stated that 21 of the items we identified were excess but contended that 34 items warranted retention for unknown future work. He stated that new contracts would require the use of 19 items.

The contractor did not provide the production schedules we had requested to evaluate their effect on the workload. We were advised that, as a result of recently completed surveys by Government procurement agencies, more equipment was being received. The decision to add more equipment was made without contacting the DCAS industrial specialist or requesting his assistance in the survey.

In one case a utilization survey conducted in early 1966, through floor checks, disclosed 89 items of idle IPE; however, with one exception, the contractor's justification for retention of the IPE was based on future production programs and was accepted by the Government. We could find no evidence to indicate that an investigation of the contractor's justifications had been performed. Our review of the contractor's formal justifications disclosed previous and planned use for 60 of the machines, but we found that nine of the machines were scheduled solely for commercial production only and that no production was scheduled for four others.

At another location a Government property official selectively analyzed usage-data for 3 months ended March 1966, noting many instances where IPE had little or no low use, but concluded, apparently without effective evaluation with the contractor, that incoming workload would disclose more desirable utilization in the future and that no items were excess,

IPE used for commercial work--From the available utilization records, we determined that 115 items of IPE, estimated to have cost \$11.4 million and located principally at four contractor locations, were being used solely or predominantly for commercial work. In this characterization we included IPE used for commercial work 75 percent or more of actual production time during periods ranging from 6 months to 1 year at three locations. At the other location this determination was based on the contractor's predicted use for the last 4 months of 1966.

At three locations Government property officials had not questioned retention of this IPE. Facilities contracts at these locations permitted use of the IPE for commercial work; and, in the cases where this was observed, it was apparently considered that the IPE was used for authorized purposes.

At the remaining contractor plant the Government was negotiating a long-term lease specifically to permit commercial use of the IPE. The contractor maintained projected usage data rather than utilization data for selected items of IPE. The records showing projected use indicated that 32 items of IPE estimated to have cost \$6.5 million would be used predominantly for commercial work the last 4 months of 1966. According to contractor estimates, commercial use of the plant was expected to be more extensive in 1967 than in 1966. DIPEC records indicated that, by the beginning of 1967, seven of these items, estimated to cost \$1.3 million, would be in a critical supply classification. This would mean that, at the present demand rate, DIPEC would not be able to fill all of the requisitions received for this IPE in 1967.

Low utilization of IPE--On May 17, 1965, the Assistant Secretary of Defense (I&L), issued a memorandum to DSA and the military services which established criteria to be used in determining the reasonableness of the contractor's actual use of IPE. It provided that, when a contractor had two or more DOD-owned machines which are capable of the same function and which are in use 35 percent of the time (14 hours a week) or less, justification would be required for continued retention. In June 1966 the Assistant Secretary of Defense (I&L) emphasized the need for conscientious application of this criteria and stated that, pending the dissemination of more definitive criteria, the evaluation of economic utilization should include the examination and justification for retention in all instances where machines of a like function were below the usage criteria specified. DSA Manual 8300.1 provided that in performing utilization surveys, maximum use would be made of contractors' machine-loading data, production planning, and machine-time records. At the locations we visited we found no evidence to indicate that Government property representatives had implemented the criteria set forth by the Assistant Secretary of Defense.

We found that in many cases contractors did not maintain utilization data which would permit application of usage criteria. Accordingly, we could identify only four items of IPE estimated to cost \$35,800 at two locations where low use was indicated by other review techniques. In three instances, however, reasonably complete utilization data were maintained. These data enabled us to question the basis for retention of 76 items of IPE, estimated to cost \$1.2 million, which did not satisfy the

criteria specified by the Assistant Secretary of Defense as we interpreted it. None of this equipment had been reported as excess by the contractor.

Generally, we found that, where utilization data was compiled for purposes of computing rent, Government property officials had not similarly used the data to analyze utilization of the IPE. Utilization surveys were generally limited to periodic attempts to detect idle IPE through floor checks. We noted that one contractor had developed minimum usage criteria calling for a review of idle IPE every 3 months; however, this contractor had not made the reviews.

Increased versatility in use of
test equipment requires
improved property management

On the basis of our review, we believe that the procedures for acquisition, administration, and redistribution of general purpose test equipment, a particular class of IPE, at contractor plants were in need of improvement. This class of IPE included primarily electronic components such as amplifiers, oscilloscopes, recorders, and signal generators.

DOD Directive 4275.5 dated March 13, 1964, and the superseding version dated November 14, 1966, placed new emphasis on property management relating to general purpose and special test equipment. The directive acknowledged that the advance of weapons technology had vastly increased the complexity, cost, and wider use of all types of test equipment. Accordingly, it provided that, to avoid duplicate investment, DOD components would thoroughly screen idle test equipment in the DIPEC inventory before procuring new items of test equipment. It provided further that, when general or multipurpose components of special test equipment are no longer required, they would be reported to DIPEC in the same manner prescribed for facilities.

Our review included two contractors who had large quantities of electronic test equipment.

One of the two contractors had not requested the contracting officer to have DIPEC fill requisitions for test equipment prior to having the purchase of new equipment authorized because, in his opinion, the test equipment in DIPEC's inventory was too old, lacked warranty, and would result in lost time if found to be unacceptable. Although the Government property administrator had notified the contractor of the screening requirement in April 1966, we noted that the contractor requested that DIPEC inventories be screened only on the occasions when the acquisition was applicable to a cost-reimbursement contract.

This contractor had over 2,400 items of test equipment on hand which, according to the responsible contractor official, were not presently needed but were being held for possible future use. No system of use data had been maintained for this IPE and the Government property administrator had not required the contractor to report any of the items to DIPEC as excess. The contractor stated that the equipment had been acquired for production of a weapons system about 8 years ago and that he doubted its usefulness to anyone else at this time.

It seems evident that screening actions could not be initiated by DIPEC because the property was not reported.

At the second contractor we observed that contractor personnel were maintaining usage reports applicable to test equipment furnished under one of five facilities contracts. The usage reports were posted on a daily basis and disclosed whether the IPE was in use and, if so, the applicable sales order or contract. The data was summarized monthly, and department

heads were required to justify retention of those items indicating usage below 25 percent.

We observed that the procedure resulted in periodic declarations of test equipment as excess. After our tests revealed excess items of test equipment controlled under other facilities contracts at this plant, the contractor expanded the tabulation of this data to the remaining four facilities contracts.

Property accounting systems not
adequate for effective management

For the most part our findings were derived from machine utilization records prepared by contractors to compute periodic rent payments. The records sometimes were confined to a group of machines where they were necessary to make the rent computation; were of limited value because hours of machine usage were not shown; did not show commercial and Government use separately; or were not maintained at all because rent was determined on some other basis. Therefore, we lacked data, for a number of the contractors we visited, on which to base our review and our questioning of retention of the IPE.

The conditions outlined in this report were due primarily, in our opinion, to the absence of a requirement that the contractors' property accounting systems furnish meaningful utilization data as a tool for property management. Also lacking were clear and specific criteria for acceptable usage levels and provisions for its periodic measurement against utilization data furnished by the contractor.

Proposed changes to ASPR now in process (ASPR Case 66-314) place the primary responsibility with the property administrator to insure that the contractor has an effective **IPE** utilization system. Facilities contracts under guidelines proposed (ASPR Case 66-314) will recognize a need for maintenance of IPE utilization records in accordance with sound industrial practices and will afford the Government adequate opportunity to inspect all such records. The contracts would require that the contractor establish minimum standards of utilization and that he review the need for IPE items when utilization falls below the established standard.

Industry representatives have expressed the view that application of a rigid standard may be impractical since many factors have a bearing upon the logical point below which IPE cannot be considered economically used. However, they are in agreement that appropriate standards should be established for required degrees of utilization as suited to the item or family of items.

Prior approval not obtained although prescribed
for use of IPE for non-Government purposes

The Office of Emergency Planning (OEP), in June 1957, established a requirement for contractors to request advance approval to use Government-owned machine tools on commercial work exceeding 25 percent of the total usage. OEP established the procedure for prior approval primarily to

preclude contractors from obtaining a favored competitive position through leasing Government-owned production equipment. To administer this procedure, ASPR 13-405 provides:

"Prior approval of the Office of Emergency Planning shall be obtained through the Assistant Secretary of Defense (Installations and Logistics) before more than 25% non-Government use of Government-owned machinery and tools *** may be authorized. ***"

We found, in inquiring at OEP, Washington, D.C., in December 1966, that since January 1, 1965, only five requests had been submitted, one of which had been disapproved. Generally, contracting officers were not requiring contractors to request and contractors were not requesting advance approval to use Government-owned IPE for commercial work in excess of the 25-percent restriction, as illustrated below. We observed that it was uncertain whether the 25-percent criteria referred to total planned use or to a fraction of the hours potentially available under one shift or two shifts, or to a certain number of days a week, etc., or if it was to be administered on a total plant or an item-by-item basis.

In four cases facilities contracts were silent or unclear as to the requirement to obtain OEP prior approval, and Government officials had not sought OEP approval even though items of IPE were being used in excess of 25 percent of actual production time for commercial work. For example, a facilities contract negotiated by the Navy required the contractor to use IPE for at least 75 percent of the yearly total of authorized hours for Government production and it was silent as to conditions that might require OEP approval for other uses.

In another instance OEP denied a contractor the use of Army facilities for commercial work, but at the same time the contractor was using Air Force facilities extensively for commercial work without being required to submit a request. In 1965 this contractor used an average of 1,000 items of IPE a month, costing \$17.2 million, for commercial work on a share basis with the Air Force. This increased to \$26.5 million in 1966 and the IPE was used in the various company operating groups on an average of from 41 to 97 percent of the actual production time for commercial work. Although the Government officials administering the property were aware that submission of requests for use were appropriate, they had not required the contractor to do this because of (1) the many items of IPE subject to commercial use and (2) their assumption that the request would have to be submitted monthly since the facilities contract requires local approvals monthly for rental purposes.

At two contractor locations Air Force facilities contracts had incorporated provisions which required the contractor to notify the contracting officer when non-Government use was expected to exceed 25 percent of the total equipment use.

In one case 105 items of IPE valued at \$6.1 million had been used an average of 58.5 percent of the production time for commercial work during the 6 months ended July 31, 1966, without advance approval. The

contracting officer stated that the contractual requirements to obtain OEP prior approval had been added in December 1965 and that he had not checked the contractor's compliance. At the other location the contractor used 67 items of IPE, valued at more than \$2 million, over 25 percent of production time for commercial work. The contractor advised us that he was unaware of the contract requirements.

Some DOD and OEP officials stated in the course of our review that approvals to use IPE should be administered on an item-by-item basis. A DOD official further stated that, by reasonable application of the rule, some exception was in order where a line of machines performed a task jointly.

Improper use of Government-owned IPE

On the basis of information available for our review, it was our opinion, that, in a significant number of cases, Government-furnished IPE was not properly used from the Government's viewpoint. In these cases advance approval for such use had not been obtained from OEP, so that the designated Government authority had not reviewed and either approved or disapproved the manner in which it was being used.

For example, an 8,000-ton mechanical forge press costing \$1.4 million was installed at a contractor's plant in late 1961 on the basis that the less efficient 4,000-ton presses, also Government-owned, could not handle all of the Government orders for jet engine midspan blades. During the 3 years ended December 31, 1965, the 8,000-ton press was used 78 percent of actual production time for commercial work without advance OEP approval while the majority of Government procurement of midspan blades was processed on the 4,000-ton presses.

Also this contractor had used 10 machines, costing from \$29,000 to \$141,000 each, 100 percent of the time for commercial work during the first 6 months of 1966 without obtaining advance OEP approval.

In another instance the Navy furnished a contractor an automatic turret lathe costing \$45,600 on the basis of the contractor's projected initial year saving of \$25,800 in operating costs. We noted that during the first year the new lathe, without advance OEP approval, was used 513 hours, or 24 percent of the actual production time, on Government rent-free work and chiefly for commercial work the rest of the time. Thus the Government did not receive the benefit of most of the saving in operating costs. At the same time, Government rent-free work totaling 5,756 hours was processed on five older, less efficient turret lathes.

In another case, during the 9-year period ended September 1966, an ammunition facility was used about 80 percent of the time for commercial work which represented over \$24 million in sales. The facilities contract, dated in November 1950, allowed use for commercial products provided this did not interfere with production of military items. In September 1965 the Navy activated this facility for rocket warhead production calling for delivery of 15,000 to 52,000 warheads a month through June 1966. Although the facilities contract specified that a production

capability of 95,000 warheads a month be maintained, the condition of the IPE was such that the contractor could not meet delivery schedules.

We noted that the commercial work remained at about its previous level; however, the contractor advised us that this did not interfere with military production because some of the machines being used could not hold the tolerances required for rocket warhead production. We were unable to determine the effect of the commercial production on the present condition of the IPE. It should be noted however, that Navy officials were unaware of the extent of commercial production at this facility.

From the records made available to us, we could not tell whether a determination as to the condition of the IPE and the effect of commercial production, had ever been made. While Navy officials conceded that previous commercial use may have contributed to the equipment's inability to meet required tolerances, they pointed out that such commercial use was allowed under the contract. The contract had not been amended to insert the OEP approval requirement which became effective June 1957.

Conclusions

The need for good property management is evident in view of the Government's large investment in IPE and the widespread demands for these resources. In our opinion, the circumstances described in the preceding pages are indicative that the Government has not always followed a policy which results in the most desirable use of its IPE.

We believe that the present methods of controlling the use and disposition of Government-owned IPE are not adequate, primarily because of a requirement for contractor property accounting systems to include meaningful utilization data as a tool for property management. We believe also that proposed ASPR changes (ASPR Case 66-314) which require the contractor to maintain IPE utilization records in accordance with sound industrial practices and to establish utilization standards are not specific enough to protect the Government's interests.

Additionally, we believe that the Government should prescribe the standards and the information needed to properly manage its equipment, including information not only as to the extent but also as to the manner of use (i.e., commercial work, Government work for which rental is paid, Government rent-free work, etc.). Moreover, the proposed ASPR revisions, in our opinion, do not adequately delineate utilization procedures and practices to be followed or required by the Government property administrator and the contractors, with respect to the special category of IPE designated as test equipment, nor do they suggest the type of standards by which retention by the contractor should be evaluated.

We proposed therefore that the provisions of the proposed ASPR changes be revised to meet the predominate need of providing records and a means to determine whether the extent and manner of use of Government IPE is satisfactory. We recognize that this procedure may be practicable only for IPE above some established cost level, such as the \$1,000 prescribed for DIPEC reporting procedures and should also exclude IPE when

the Assistant Secretary of Defense has restricted and reserved use of IPE to specific military programs. Moreover, in our opinion, attention should be directed to the question of whether or not lease of IPE for commercial work is desirable. We identified a number of instances where need for equipment so used existed at other DOD contractor plants.

While OEP approval is directed primarily at precluding contractors from obtaining a competitive advantage, current practices appear to be inconsistent also with the following instructions.

ASPR 13-301(e) "Facilities shall not be provided by the Government *** solely for non-Government use."

Defense Mobilization Order 8555.1 "*** Government-owned production equipment should not be leased to private industry until its unavailability from private sources has been established. ***"

We believe that, when the planned commercial use of a machine exceeds 25 percent of its total planned use, prior approval should be obtained, not only to meet OEP's reporting requirements and purposes, but also to provide the responsible DOD management activity with a comprehensive view of the extent to which Government-furnished IPE, by types, are being applied to private commercial purposes.

Therefore, we believe that ASPR 13-405 should be clarified to show that prior approval is to be made on a machine-by-machine basis and that the term "25 percent non-Government use" be more precisely defined. In addition, we believe that ASPR should be clarified to differentiate OEP approvals from local monthly approvals for rental purposes.

Agency comments and our evaluation

The Deputy Assistant Secretary of Defense (Procurement) by letter of August 7, 1967, advised us that the ASPR is being revised to prescribe that the contractor be required contractually to establish and maintain a written system for controlling utilization of IPE. The Deputy Assistant Secretary indicated that the revised regulation establishes the responsibility for each contract administration activity, and other DOD components, to conduct property system surveys to ensure the effectiveness of such a system and to show the extent and manner of use of Government-owned IPE. He indicated also that it provides for control, detection, and reporting of Government-owned IPE which are not being effectively and economically utilized by Defense contractors.

The Deputy Assistant Secretary stated that the Department will study the feasibility of maintaining utilization records on a machine-by-machine basis, as for example, IPE of selected high value and that, if the study proves the practicality of such an approach, the ASPR will be modified accordingly.

We believe that the tabulation of machine-by-machine utilization data may be excluded for IPE approved by the Assistant Secretary of Defense

for specific programs, inasmuch as the utilization of this IPE is restricted to specific military hardware items and for IPE above some established cost-level, such as the \$1,000 prescribed for DIPEC reporting procedures. Our report points out that we were unable to determine the manner of use of many general purpose type of equipment items at many contractor plants we visited because adequate utilization records were not maintained.

Our review established that, of the 17 contractors examined, only five contractors maintained adequately comprehensive machine-by-machine utilization data. Two of the five contractors accumulated the data by manual postings and the other three through mechanized procedures (tab card system). One of the contractors was converting from mechanized procedures to an electronic data collection system designed for manufacturing industries. Included among the applications of the electronic data collection system is "Machine and Tool Utilization," and we observed that three of the remaining 12 contractors reviewed were in the process of installing similar systems at the time of our review.

In regard to prior approval by OEP for commercial use of IPE of more than 25 percent, the Deputy Assistant Secretary stated that such approvals on a machine-by-machine basis would create a substantial administrative burden not commensurate with the goals sought. He further stated that to maintain a factual utilization record by individual machine for commingled Government and contractor-owned plant equipment on a contract-by-contract basis is impractical because it would be very time consuming, disrupt the contractor's production planning process, and result in the addition of a costly administrative burden for both Government and industry. DOD feels that a more practical approach is one of more aggressive surveillance, maximum use of **all** plant equipment, and additional emphasis on the collection of adequate rentals; and they stated that they were pursuing this.

The Deputy Assistant Secretary indicated that the Department intends to meet with OEP for the purpose of reaching an acceptable solution on these points: defining "25-percent non-Government use" and the differentiation of OEP approvals from local monthly approvals for rental purposes.

On the basis of available utilization records we questioned retention of 296 items of IPE at contractor plants. DIPEC records revealed that 81 of 296 items of IPE were classed as being in either critical or short supply. A closer analysis of these items indicates that commercial use was concentrated on the IPE with the highest average acquisition cost as follows:

	<u>Number</u>	<u>Acquisition cost</u>	
		<u>Average</u>	<u>Total</u>
Commercial use	24	\$84,700	\$2,032,000
Not used	43	27,300	1,172,400
Low use	<u>14</u>	12,500	<u>174,900</u>
Total	<u>81</u>		<u>\$3,379,300</u>

Without requiring contractors to furnish machine-by-machine utilization data within reasonable limits and without enforcing realistic use criteria requiring prior approvals when such machines are to be utilized on commercial work, DOD lacks adequate assurance that the most efficient machines are used to process Government work, hence minimize procurement costs.

We question the Deputy Assistant Secretary's statement that the maintenance of utilization data, machine-by-machine, is impractical, very time consuming, disruptive and costly. Earlier, we pointed out that some contractors already maintained individual machine utilization data and that others were installing electronic data collection systems which had application to providing this data. It seems, therefore, that the Government will bear a share of these investments through the end-item prices it negotiates, and that the imposition of a requirement on these contractors to furnish such utilization data to distinguish Government and commercial use does not seem unreasonable.

One contractor possessing 1,091 items of IPE, each having a rental value in excess of \$100 per month, would not furnish the utilization data since it was not contractually required; and, if the Government insisted on the data, he would insist on adequate reimbursement for records solely for the benefit of the Government. At this location the Government Administrative Contracting Officer estimated that it would cost about \$250,000 a year to furnish utilization data for the 1,091 machines; however he could not locate and furnish us the basis for the estimate.

Another contractor who reports monthly machine-by-machine utilization, broken down by Government and commercial use, furnished us an estimate of the yearly cost to provide this data on 880 machines as follows:

Recording--direct labor	\$4,572
Processing--labor	1,725
EDP machine time	678
Forms	<u>425</u>
Total annual cost	<u>\$7,400</u>

~~We estimate that a machine-by-machine computation of the rent at this contractor would increase the annual rent payment by about \$582,600. (See p. 28.)~~

Recommendations

It seems reasonable to expect that, if the Government provides IPE to contractors, the contractors should furnish the Government data as to how they are using it. Our review demonstrates the effectiveness of controlling IPE on the basis of use data provided on a machine-by-machine basis. Therefore, we recommend that the Secretary of Defense emphasize this basis in the study which DOD will perform regarding the feasibility

of maintaining utilization records within the limits suggested earlier in this report.

Also, we recommend that the Director, Office of Emergency Planning, similarly administer prior approvals for planned commercial use of IPE.

Redistribution of industrial plant equipment

Idle IPE not redistributed by DIPEC in some instances

At DIPEC our examination was directed toward the identification of requisitions for items of IPE which were available in contractors' plants or reserve stocks and were not redistributed. Our examination of 151 requisitions selected at random from an estimated 13,620 requisitions for metalworking and general plant equipment processed by DIPEC during the 6-month period ended June 30, 1966, showed 12 instances where suitable equipment which had been reported as available was not offered to meet the requirement.

Our sample indicated that during the 6 months DIPEC could have offered to fill an additional 1,082 requisitions from metalworking and general plant equipment in its idle inventory. However, because our estimate is based on statistical sampling, the number of additional requisitions that DIPEC could have offered to fill could be as low as 487 or as high as 1,677, with 95 percent assurance that this conclusion is correct.

On the basis of the average unit value of such equipment in the inventory as of December 31, 1966, we estimate that the total value of the additional equipment that could have been offered during this 6-month period was about \$12 million. We also found that additional IPE was purchased to satisfy the requirement in six of the 12 instances. In another instance, equipment on hand was modified at an undetermined cost in order to fill the requirement.

We found in five instances that available equipment was not offered because persons directly responsible for making equipment allocations had not been adequately instructed and were making decisions that certain requisitions should not be filled, even though DIPEC's policy is to allocate available equipment to fill established requirements of any authorized requisitions.

For example, in May 1966, DIPEC received a requisition for a milling machine. The requisition was funded and indicated that the item would be purchased if not available from DOD's idle equipment. DIPEC issued a Certificate of Nonavailability and the requestor purchased the item at a cost of \$10,159.

Our review of DIPEC records showed that a similar piece of equipment was in an idle status at the time the requisition was processed. DIPEC representatives stated that the idle equipment was not offered because of a belief that the requesting agency intended to place the item in stock and did not have a specific use for the item. However, our review of the requisition submitted to DIPEC showed that the item was required to supply a high-priority requisition from the Aberdeen Proving Ground, Maryland.

In another instance, we found that a requisition was not filled because a suitable item had not been recovered from DIPEC's excess stocks when requirements computations showed that the item was needed. DIPEC had not issued instructions requiring the screening of items recently declared excess, but still on hand, when later computations showed additional requirements.

For the remaining six requisitions, we were unable to identify any specific reason why they were not filled from the idle equipment inventory. Officials of DIPEC agreed that the items of IPE identified by our review were suitable to meet the requirements shown on the 12 requisitions.

We proposed to the Secretary of Defense that DIPEC's management controls be reviewed and new or additional directives be initiated, where required, to ensure that all equipment which could be utilized to meet anticipated needs is considered and that suitable equipment is offered to authorized requisitioners in each instance when it is available. We proposed that a program of personnel training and supervisory review be instituted to ensure adherence to established policy and procedures.

Agency comments

The Deputy Assistant Secretary advised us that **DIPEC** had established a training program for all DIPEC commodity managers and that particular emphasis was being placed on the requirement to document the issuance of Certificates of Nonavailability or other specific conditions under which items in inventory are rejected as unsuitable for the intended use.

In view of the action taken by the Department of Defense, we are **not** making any recommendation at this time.

Rental of industrial plant equipment--general

Need for uniform terms in IPE lease contracts

Although uniform rates for rental of Government-owned machines to contractors had been prescribed, we found that the various bases upon which the rent payments were negotiated resulted in a lack of uniformity in the rates actually charged, inequities between contractors, and, in some cases, reduced rent payments to the Government. The departure from uniform rates exists because the ASPR allows credits to the rent liability, representing the portion of usage for Government rent-free work, to be based on a variety of allocation bases applied to the total rent liability and because of other basic differences in the rental formulas applied at various locations.

Uniform rates prescribed--In 1956 the need to establish uniform leasing policies with respect to rental rates was acknowledged in reports prepared by the Joint Committee on Defense Production and the United States Senate Select Committee on Small Business. One report states that sizable numbers of Government-owned machine tools were being leased to private industry and that, because a uniform leasing policy had not been adopted, discrimination and apparent low-rental policies tended to place small concerns at a competitive disadvantage. Moreover, the Select Committee on Small Business believed that leasing for non-Defense purposes should be held to a minimum; a policy which is currently reflected in OEP and DOD instructions.

Therefore, an Inter-Agency Task Group was formed with members representing the DOD and six other agencies of the Government. On June 19, 1957, the recommendations of the task group, which were developed by consulting representatives and leasing experts in the machine tool industry, were adopted and uniform rental rates for the leasing of Government-owned machine tools to private industry were established. The uniform rates, which are currently stated in OEP's Defense Mobilization Order 8555.1 and ASPR section 7-702.12, were adopted on the premise that all lessees should be treated alike and that all pay rent at the same rates.

The uniform rental rates for machine tools and secondary metal-forming machinery are as follows:

<u>Age of equipment</u>	<u>Monthly rental rate applied against acquisition cost</u>
0 to 2 years	1-3/4%
over 2 to 6 years	1-1/2%
" 6 " 10 years	1%
" 10 years	3/4%

Current lease terms permit inequities--The DOD allows rent-free use of its facilities for military orders, and, where authorized for commercial work, its use is generally shared. Although the gross rent liability usually is determined from the prescribed ASPR rates, machine by

machine, inequities arise, in some cases, in computing a rent credit representing the portion of rent-free Government work. This occurs because ASPR allows and contractors compute rent reductions based on overall allocations of the workload between Government and non-Government work according to the relationship of various factors--such as sales, labor hours, or machine hours--rather than computing rent reductions machine by machine according to the ratio of shared usage of the particular machine.

We did find in one instance that the overall allocation method used produced rentals comparable to an individual machine computation. In two cases we found that the overall allocation method resulted in lower rents for the Government. This effect was caused in these cases by averaging machine utilization and combining higher utilization for Government work of lower valued machines with higher utilization for commercial work of high valued machines. In additional cases inequities were caused by other basic differences in the rental formulas applied at different locations. Some of the differences we found are illustrated below:

One contractor computed rent on a machine-by-machine basis and computed the rent credit for each machine individually on the basis of the number of machine hours applied separately to Government work and to commercial work. However, where separate tabulations of actual machine-hour use could not be made for certain support equipment, no rent was charged. As a result, the contractor used the Government-owned support IPE for commercial work without charge.

At another location, the contractor computed the rent credit on the basis of the average utilization of the machines used for Government work. The inclusion of certain downward adjustments, because it was considered a reserve plant, and the use of an average ratio of machine utilization in the calculation resulted in a lower rent liability than would have resulted from calculating rent on a machine-by-machine basis. On the basis of machine usage for a 10-week period, we estimate that a machine-by-machine calculation would have increased the rent payment for the 12 months ended September 30, 1966, from \$226,400 to \$809,000 or \$582,600 in excess of the present method. The cost of maintaining utilization records, machine by machine, amounted to \$7,400, as estimated by this contractor, and the details of this estimate are shown on page 23 of this report.

In another case, rent of IPE applicable to a Navy standby facility is based upon 2 percent of sales prices. ASPR prescribes use of the uniform rates and currently makes no provision for computing rent on this basis. We were unable to make a determination of rent based on machine-by-machine use data in this instance; however, we estimate that, under the current procedures permitted by ASPR, the rent would have increased from \$83,000 to \$194,000 during the year ended September 30, 1966.

Rent for IPE was computed according to varying formulas in each of four facilities contracts negotiated by different military services with the same contractor. We noted that the rent paid for use of like classes of machines of similar age and value would vary widely due to differences in rent formulas.

Rent payments in another case were minimized through the computation of the rent credit including engineering labor hours which had no relationship to machine hours or to the rent of the IPE. In the rent computation at two contractor locations, the rent liability, before applying the credit, was based on application of the ASPR rates to all Government IPE at one location, while at the other location only the Government IPE requested for commercial use was included.

Prior approval to rent IPE
not always requested

We noted instances where contractors were using IPE for commercial work for which approval had not been requested in advance although approval is required by the facilities management contract.

To discourage unauthorized use of Government facilities for commercial work, ASPR 7-702.12(e) and facilities contracts provide:

"If the Contractor uses any item of the Facilities without authorization, the Contractor shall be liable for the full monthly rental, without credit, for such item for each month or part thereof in which such unauthorized use occurs. However, the Contracting Officer may waive the Contractor's liability for such unauthorized use if he determines that the Contractor exercised reasonable care to prevent such unauthorized use. In this latter event, the Contractor shall be liable only for the rental that would otherwise be due under this clause."

In a few instances where the Government property administrator found that machines had been used for non-Government work without prior approval, the machines were subjected to the rent as normally computed. Full monthly rental was not charged because it could not be shown that contractors did not use reasonable care to prevent such use.

At one contractor plant selective floor checks conducted by the Government property administrator at month-end showed numerous instances where IPE was used for commercial work which the contractor had not included in his monthly request to the Government plant representative. In March 1965, the contractor was advised that, in the past 6 months, 7.5 percent of the IPE examined was being used without prior approval. Although corrective action was promised, floor checks revealed that during the year 1965 the incidence of discrepancies was 10 percent and during the first 9 months of 1966 it rose to 13.5 percent.

We noted instances at three other contractor locations where machines were used for commercial work without obtaining prior approval as required by the facilities contracts.

DOD reviews and corrective measures

We found that the reviews of rent by the Defense Contract Audit Agency (DCAA), when performed, were generally limited to verifying the accuracy of data in the rent computations and the procedure for computing

the rent in accordance with the contract formula. An evaluation as to whether the prevailing terms of the lease were equitable to the Government was not apparent.

However, inequities which we believe exist in the rent formulas, as discussed in this report, derive from the related clauses negotiated by the respective services as part of facilities contracts. The ASPR Committee now has under consideration a policy (ASPR Case 65-19) under which the contractor will be charged rent for all Government IPE in the contractor's possession. When the IPE is used on a Government contract, the contractor will reduce the gross rent liability by the amount of a rent credit negotiated for each contract. DOD officials believe that this procedure will ensure against competitive advantage and will act as an incentive to contractors to return IPE to the Government as soon as it becomes excess.

Conclusions

In our opinion, the determination of rent on a machine-by-machine basis and similarly applying the rent credit for Government rent-free use to each machine above an established dollar value in its ratio of Government versus commercial machine hours of use would be more accurate and more equitable than the various methods presently in use.

The maintenance of utilization data for Government-owned IPE, as recommended in our discussion of utilization practices, would provide the basis to more accurately compute rent on an item-by-item basis. The feasibility of maintaining use records, machine by machine, has been established by five contractors included in our review, and one of the contractors was computing rent in the manner in which we suggested, as detailed above. Moreover, such a procedure would eliminate discrimination in rates charged to different contractors because the credits would be uniformly computed for each item based on actual machine hours used. Broad allocations are appropriate in those cases where Government versus commercial machine usage cannot be tabulated, such as for certain common support equipment or for IPE below an established value where no utilization records are maintained. Further, the tabulation of utilization data could be expected to disclose commercial use for which approval had not been requested and thus supplement the present complete reliance on floor checks.

The DOD proposal to assign a rental charge to all Government IPE in a contractor's plant could, dependent upon the form in which it may be finally implemented, be expected to provide an incentive to dispose of or to redistribute IPE which was poorly utilized. However, the proposal retains the choice of various methods of allocating the use between Government and commercial work which, we believe, will produce inequities of the type discussed in this report. We proposed, therefore, that further study of this proposal include consideration that actual use be determined on a machine-by-machine basis.

Furthermore, it appears to us that the DOD-proposed method would be exceedingly complex to administer, particularly as to the effect of contract changes after the negotiation of rental credits under the contracts, and we proposed consideration of this question if not previously

considered. Industry reaction to the DOD proposal has not yet been obtained, and therefore we are unable to complete our evaluation of this alternative.

The present ASPR clause, which would make a contractor liable for the full monthly rent for use of Government IPE without authorization, was apparently intended to prevent such unauthorized use. We believe that the penalty concept is appropriate since a penalty, or even normal rent, can be assessed only in those instances where unauthorized use is detected by Government property administrators. However, in the few instances where we noted that unauthorized use had been detected, the penalty had not been imposed because of the "reasonable care" limitation in the clause. We proposed that, in order to improve control over the use of Government TPE, the Department consider the need for more stringent language in the present ASPR clause.

Agency comments and our evaluation

The Deputy Assistant Secretary indicated that several alternative proposals concerning conditions for use of Government plant equipment were being considered by the ASPR Committee, none of which contemplate a determination of actual equipment use on a machine-by-machine basis. With respect to the need for more stringent language in the present ASPR clause, the Deputy Assistant Secretary has stated that DOD has continuously taken the position that contractors should be held liable for any unauthorized use; however, he has indicated that the Department will consider the need for stronger language in paragraph (e) of the "use and charges" clause (ASPR 7-702.12) to ensure adequate control over the use of Government-owned IPE in possession of Defense contractors.

Our proposal to compute rent on a machine-by-machine basis is the most accurate system within our knowledge, and it also provides data for management determination of the contractor's continued need for the machines. Moreover, our report points out the existing inequities caused by basic differences in the rental formula applied at different locations.

Recommendation

We recommend to the Secretary of Defense that the ASPR Committee closely examine the feasibility of computing rent on a machine-by-machine basis and similarly applying the rent credit for Government rent-free use to each machine above an established dollar value in its ratio of Government versus commercial machine hours of use.

Revised rental procedure needed to increase
return on investment in heavy presses

The Air Force heavy press program was begun during World War II as an attempt to produce major aircraft structural elements through forging and extrusion processes. Since there was no commercial requirement at the time for presses of this size, the Air Force undertook the sponsorship and support of the heavy press program. The first of these presses was released to production in 1946; additional presses were acquired during the 1950's. The program currently includes about 13 presses, costing about \$76.4 million, which are located at seven plants. Four of these plants are Government owned and three are contractor-owned. Also, the Air Force has provided land, buildings, and support equipment costing about \$132.6 million.¹

Rent for the use of the heavy presses has generally been charged for all work, both Government and commercial, at the rate of 4 percent of sales. Air Force officials said that one of the reasons for basing rent on sales was to relieve the operators of some of the risk of initial operation during early stages of the program. Basing rent on sales removed part of the risk, since no rent would be due from the operator unless a salable product was produced and sold. A second reason for basing rent on sales was ease of administration. Utilization records would not be necessary and Government surveillance could be held to a minimum.

At the three locations visited, we found that the heavy press rent liability for the most recent 12-month period available totaled about \$1.9 million. Of this amount, about \$1.4 million was applicable to Government work. The total rent liabilities in this 12-month period represented returns on the Government investment ranging from 1.03 to 2.03 percent.

In some cases the presses were used at capacity and significant amounts of commercial products were being processed. In comparison with current rates of return on Government bonds and commercial paper, the 1 to 2 percent annual return on the Government's investment in heavy presses appears to be too small from a financial point of view.

We did not review the pricing or purchase orders at higher subcontract or prime contract levels to determine the effect of the rental cost on end-item prices. However, since the press operators may be below the first tier subcontract level, the portion of the end-item price attributable to rent may include the indirect expense and profit factors of one or more tiers. Because of the application of such factors to the cost base at each tier, it seems logical that the cost of rent included in the Government's end-item prices may be significantly greater than the rent received by the Government from the heavy press operators for the same work.

¹Data in this paragraph are based on a 1962 report; however, an Air Force official at Wright-Patterson Air Force Base advised us that there had been no significant changes after that time.

One reason which has been advanced by Air Force officials for retaining the present rates was that an increase in rental rates applicable to both commercial and Government businesses would cause increased spending of appropriated procurement funds, because of the inclusion of rent costs, plus the application thereon of indirect expense and profit factors of higher tier subcontractors and the prime contractor, in the end-item prices. Air Force officials said that the reason for charging rent for all work was the difficulty of ensuring that the Government would receive adequate consideration for rent-free use, as is required by ASPR 13-402. Since the heavy press operators are often as low as the third tier subcontract level, they stated that it would be difficult to determine whether a reduction in the press operators' costs would be passed on through all the higher tiers and would result in lower end-item prices. They stated further that they would authorize rent-free use under special circumstances. They said that the Navy has prime contracts with three extrusion press operators under which rent-free use would be feasible but has not been requested.

A review of heavy press rental policies was requested by OEP in 1965, with a view to possible modifications which would increase the yearly monetary return to the Government. The review was made in 1966. Air Force officials would not provide us with information developed under this review because the report had not been released.

Conclusions

We believe that there is an alternative to an across-the-board increase which appears to be more equitable and which, at the same time, should bring a more realistic return to the Government. This would be to authorize rent-free use of the presses when used on Government work and to increase the rental for commercial use of the equipment.

The overall use of the presses has significantly increased since the inception of the program. Although the predominance of use is for Government end-items, significant amounts of commercial sales are now being processed through the presses. Also, the present procedure provides no assurance that Government end-item prices are not significantly increased by the pyramiding of higher tier indirect expenses and profit on the rent cost included in prices to the Government of forgings and extrusions. The authorization of rent-free use for Government work would also be consistent with the general leasing practices governing other types of IPE used by contractors and subcontractors on Government orders.

In comparison with current rates of return on Government bonds and commercial paper, the 1 to 2 percent annual return on the Government's investment in heavy presses is not acceptable, in our opinion, from a financial point of view. We proposed, therefore, that DOD reexamine its current policy of not authorizing rent-free use of Air Force heavy presses used on Government work and that priority effort be applied to increasing the Government's return through rental arrangements.

Agency comments

The Deputy Assistant Secretary has advised us that DOD, in conjunction with the Air Force, is reexamining existing arrangements pertaining to rental charges **for** use of these presses and is considering such aspects as the waiving of rental charges for Government **work**, the increasing of rental returns **on** commercial use, and the feasibility of selling some of the presses to Defense contractors.

Modernization of industrial plant equipment

Prospects of continued large Government investment in machine tools in possession of contractors

The basic policy of DOD, as stated in ASPR, is very restrictive as to furnishing new Government-owned facilities, including industrial plant equipment, to contractors. It provides generally that new facilities shall not be furnished where an economical, practical, and appropriate alternative exists.

The Department of Defense program for replacement of Government-owned machine tools was initiated in 1955 for the purpose of maintaining such tools in a modern condition. To accomplish this objective, the military departments were to include in their annual budget requests from 2 to 5 percent of the acquisition cost of the machine tools listed in departmental inventories. The replacement of machine tools is distinguished, in DOD directives, from the provision of additional facilities to increase production capacity.

According to DOD reports, the cost of machine tools in military inventories as of October 1966 was \$2.8 billion, with most of these tools in possession of contractors. Fiscal year 1966 expenditures amounted to about \$51.5 million for modernization and replacement purposes. Such expenditures had risen from an average of \$27.4 million in the 1958 through 1963 fiscal year period. Expenditures of \$65.8 million were forecast for the fiscal year 1967.

Anticipated savings not always realized as planned

Department of Defense Directive 4275.5 requires that the replacement of machine tools be justified on economic grounds. This directive recommends that machines not be replaced unless their cost can be amortized through operating savings in a period of about 3-1/2 years.

The justification, which is prescribed under another DOD instruction, 4215.14, must show that the savings were based on a comparison of the operating costs of the machines then in use with the operating costs of a new machine which could replace the older machines. The reduction in cost is then computed for a 12-month period immediately following the date of preparation of the estimate on the basis of existing and anticipated production requirements known to the contractor. Annual amortization costs of the machines are also considered in computing the saving. One year after each modernization item is released for production use, the contractor is required to submit a postanalysis report to show actual cost savings for that year.

Our examination into the justification and the first-year savings included in the postanalysis reports of five contractors, which had acquired machines under this program, indicated that savings had not been achieved as planned by four of the five contractors and that planned savings had

been exceeded by the fifth contractor, as shown below. We did not review the savings reported by the contractors.

Con-tractor	No. of machines acquired	Cost of machines	First-year savings		Justifications in excess of amounts realized
			Included in justification	Estimated amount realized	
A	25	\$3,223,000	\$1,876,000	\$ 855,000	\$1,021,000
B	18	2,438,000	1,600,000	520,000	1,080,000
C	4	886,000	405,000	49,000	356,000
D	3	471,000	272,000	176,000	96,000
E	<u>10</u>	<u>1,490,000</u>	<u>1,380,000</u>	<u>2,164,000</u>	<u>-784,000</u>
Total	<u>60</u>	<u>\$8,508,000</u>	<u>\$5,533,000</u>	<u>\$3,764,000</u>	<u>\$1,769,000</u>

Although the savings were not achieved as planned by four contractors, it appears that the reported first-year savings would have provided for recovery of the Government's investment approximately in the 3-1/2-year guideline prescribed by the Department for three of the five contractors. However, for contractor A, one of the machines used on military production during the first year, which accounted for \$450,000 of the reported first-year savings, was subsequently diverted to commercial work for about 75 percent of the production time. For contractor E also, machines usage in later years for commercial work began at 12 percent and, in one instance, reached as high as 97 percent of production time. Most of these machines were subsequently sold to the contractor.

We found differences between the savings proposed in the justifications and the reported savings due to the failure of Department guidelines to recognize the lead time needed to acquire and put the machines in operation and due to numerous errors in justification documents for contractor machinery acquisitions.

Acquisition lead time

The present Department of Defense guidelines for the computation of cost savings to be realized through the use of new machines do not recognize the time required to approve, procure, and install a machine and to make it operational. Instead, the guidelines require that contractors use the 12-month period immediately following the date of preparation of the formal justification as the base period for computing savings expected to result from the use of the new machinery.

In our review of the five contractors' machine acquisitions, we found that a considerable amount of time had elapsed from the date the justifications were prepared until the machines were put into operation. For one contractor, for example, the elapsed time averaged 20 months. In the case of two contractors, we noted no appreciable adverse effect; however, three contractors had substantially less Government production for the machines involved than they had estimated when justifying the machine acquisition.

For example, a contractor justified acquisition of machines on the basis of known or anticipated production under certain programs for the 12-month period immediately following the date of preparation of the justifications. However, from 9 to 36 months, or an average of 20 months, elapsed before the machines became operational. After the first year of production, contractor reports showed savings of \$855,000 resulting from the use of these machines compared with the \$1.9 million annual savings utilized to justify acquisition. The reports showed that, during the first year, the actual use was only 53,000 hours whereas it had been estimated at 152,000 hours.

Three machines costing \$345,000 had not been used to any great extent at the time of our review because they had not become operational until 19 months after completion of the production order for which the acquisition was justified. Savings attributable to these machines amounted to only about \$2,000 during the first year after acquisition compared with estimated savings of \$165,000 used to justify their procurement. Another contractor included in the justification the production requirements for three different missile configurations for which it was known that production would be virtually completed or substantially curtailed by the time the machines could be installed or would be substantially curtailed during the year following installation of the machines.

Preparation and review of justification data

We found numerous errors in contractors' justifications which, if they had been detected and corrected, would have indicated that the savings anticipated from use of the machines were not sufficient to recover the cost of the machines as specified on the form submitted. Among the errors were estimates of production requirements in excess of requirements shown on contractors' production forecasts; labor and efficiency rates in excess of the rates warranted on the basis of actual experience and records; and in two cases, inclusion of the savings anticipated on commercial production.

At the one military command headquarters visited, available records indicated to us that a detailed review had not been made of contractors' justifications. Officials at the headquarters advised us that they had relied on the accuracy of the presentation by contractors and the evaluation by the service plant representative. Further, we were advised by these officials that, due to a shortage of manpower, they had been able to perform only limited reviews.

Agency officials at one contractor's plant, in most instances, forwarded the justifications to higher headquarters without specific findings, corrections, or recommendations. Officials at another contractor's plant advised us that their review of justifications consisted of examining, on a selective basis, supporting records such as cost records and purchase order requirements. Although we found in the files at one location reference to reviews by the military service representative, we found no evidence as to the records examined or the extent of the review. The military service representatives stated they had reviewed cost savings information in a few cases, but with little success due to lack of support for the savings estimate.

For example, one contractor submitted a request for an 8,000-ton press valued at about \$1.4 million. The justification was based on a projected annual production of 79,380 units of a jet engine blade, including both commercial and Government requirements. A production forecast submitted by the contractor with the justification showed 27,215 units of the blades for about the same period as the 79,380 units used in the justification. The 27,215 units consisted of 14,507 units of the military blade and 12,708 units of the commercial blade.

After installation of the 8,000-ton press, the contractor reported production of 10,118 blades on the press during the first year. Total production was about 24,000 blades on all presses during the same period. After the first year, the press was used extensively for commercial production. Prior to approval of purchase of the press, the contracting officer requested the resident auditor at the contractor's plant to review the validity of the justification data. However, officials at the command headquarters authorized procurement of the press before the review was made. The responsible military service representatives had, in several instances, attempted to verify the savings claimed but found that the contractor was unable to substantiate its computations or to show that the savings were passed on to the Government.

Expenditures of \$471,000 for three machines were approved for another contractor on the basis of first-year savings of \$272,000. We found that the projected estimated savings data were substantially overstated. This resulted from the contractor's basing the savings computation in part on excessive indirect labor rates and on maintenance charges lower than indicated by experience and failing to include tooling costs attributable to modern machines. After adjustment for these differences, savings of about \$154,500 for the first year of operation would have been indicated. Our review of the files on the contractor justifications involved indicated to us that a thorough review of the justifications had not been performed. In most instances, justifications were forwarded to higher headquarters without specific findings, corrections, or recommendations.

Although we are unable to surmise the effect that accurate justification data would have had on the decision to purchase the machines discussed in the above examples, we believe that it is evident that such decisions should be based upon accurate information.

Need for assurance that resulting savings
will be passed on to the Government

Savings resulting from the modernization and replacement of machines used under cost reimbursement contracts are passed on to the Government since reimbursement to the contractor is based on costs incurred. For incentive-type contracts priced prior to a modernization action, the Government participates in savings resulting from use of new machines only to the extent of its profit-sharing ratio. In the case of firm fixed-price contracts priced prior to modernization action, no return is normally achieved unless special contract provisions are made.

At the time of our review, the Department's procedures did not require a contractual provision for recovery by the Government either of savings, under firm fixed-price contracts or of the full amount of savings under incentive-type contracts. In our reviews, we identified certain contracts where price adjustments seemed to be appropriate to permit the Government to realize the full savings resulting from the provision of new Government-furnished equipment. However, we also found that in many cases the savings reported by the contractor were not supported by sufficient documentation for verification.

For example, as discussed previously, in 1960 a contractor acquired an 8,000-ton press at a cost of \$1.4 million for production of jet engine blades. In May 1963, the contractor submitted a report showing savings of \$450,000 for the 1-year period when the press was in productive use. **An** Air Force review of the savings disclosed that the savings had been based on judgment and assumptions, and contractor officials agreed with the conclusions of the Air Force review. We found that there had been no price reduction under fixed-price contracts for blades produced on the new machine during the first year of production. Another Air Force review in June 1966 indicated that there had been no improvement in the contractor's accounting system with respect to determination of savings.

Another contractor had a number of multimillion-dollar incentive-type contracts which had been negotiated before various new machines were added to its facilities contract and were in an active status at least a year after the machines were placed in operation. The prices of these contracts had not been specifically adjusted to reflect modernization savings. The utilization of the machines under a contract could not be determined from the contractor's records. Government contracting officials told us, however, that, during the operating period referred to, the machines were utilized almost entirely on Government programs and that they could have been used on the incentive contracts.

The Department currently has in process a proposed new ASPR section 7-705.20 which provides that any savings under certain types of contract that result from the furnishing of new equipment are to be returned to the Government either as direct reimbursements or through contract price reductions. It also prescribes the maintenance of adequate records for this purpose. The section is limited to firm fixed-price contracts or subcontracts or to fixed-price contracts or subcontracts with escalation.

Private investment in plant equipment
not always encouraged

DOD Directive 4275.5 states as a general policy that:

"Basically, the contractor will be encouraged to replace old, inefficient Government-owned equipment or manufacturing processes with modern more efficient, privately owned equipment. ***"

In submitting justifications, contractors generally were not required to include statements as to their ability or willingness to finance the equipment. At most locations where we inquired into this matter, either

the contractors had not been requested to acquire privately owned equipment or the files gave no indication that use of private funds had been considered in evaluating the proposals we examined.

As to the latter cases, we were informed by Government officials that contractors had been encouraged to use private capital; however, no record of such attempts was found. At two locations, we did find evidence that the possibility of contractor financing had been questioned in connection with certain submissions; in which cases Government financing was justified because of contractor investment in other equipment or facilities. It appears to us that the Government's investment in this program is sufficiently great that the question of contractor financing should receive positive attention in all cases.

For example, four items of IPE were being furnished to one contractor under modernization programs at a total estimated cost of \$422,000. The contractor's investment in IPE was three times that of the cognizant military service and included his expending \$4.4 million for 110 items of IPE in 1965 and 1966. Contractor officials indicated to us that, if the purchase of the four items had been necessary, they would have been willing to make the investment at that time. Service officials stated that they had made the replacements on the basis of estimated savings anticipated from the provision of more efficient machines and that they were following the replacement guidelines set out under DOD Directive 4275.5 which states, in part:

'Five percent of the value of the inventory of production equipment in current use will be considered as a valid level for programming annual replacement of the active industrial equipment.
***'

The fiscal year 1966 modernization program for another contractor included four gear-making machines amounting to \$232,100. The justification for replacement was based on data showing that the investment would be repaid within 3 to 4 years through reduced operating costs. We noted that, to achieve this objective, the initial-year use would have had to exceed current use by about eight times but that, as of September 1966, the contractor still had no active requisitions for additional gear machine operators. Moreover, one of the replaced machines had been used exclusively for commercial work for at least a year. Military officials informed us that the contractor had not been encouraged to invest its own capital in these machines.

DOD officials informed us that existing and experimental incentives have met with limited success in encouraging private investment in IPE. Department officials directed our attention to the following factors.

1. The weighted guidelines which provide additional profit to contractors providing equipment required for DOD contracts were generally considered insufficient by contractors to warrant purchase of the IPE.
2. The facilities amortization plan which guarantees contractors a minimum depreciation recovery had been tested at some contractor

plants and was unsuccessful. Under this plan, if a contract were terminated before 50 percent of the investment had been written off for tax purposes, the Government would underwrite the difference. Contractors felt that this procedure offered no greater incentive than that currently existing under tax regulations which allows accelerated depreciation charges.

3. The short duration of Government contracts, as a practical matter, reduced the incentive for contractor investment.
4. In allocating funds under modernization programs, the Department gave consideration to the contractor's record of investing its capital in equipment. The needs of the overall military programs were the underlying consideration; however, the estimated savings shown on the application for the IPE was a primary factor in providing funds.

One contractor informed us that its policy was to invest in IPE one half of its after-tax earnings, plus the amount of depreciation for the period. The remaining IPE needed would then be requested from modernization funds and the DIPEC inventory. The stated policy appears to be in consonance with present DOD objectives in the modernization program.

Conclusions

While the Department's policy is very restrictive as to the conditions under which new Government facilities will be furnished to contractors, the modernization and replacement program appears to provide a means for contractors to acquire new machines for old ones under different and less restrictive criteria. The program as presently administered will, in our opinion, perpetuate the large Government investment in general purpose machine tools in possession of contractors and thus defer indefinitely the time when contractors must furnish all facilities, in accordance with the Department's basic policy, required for performance of a Government contract.

We proposed that, in consonance with the foregoing conclusions, the Department place concentrated effort on the revision and administration of the following aspects of its industrial facility modernization and replacement program.

1. Inclusion in procedures of a requirement for the specific consideration of, and a statement as to, the contractor's ability or willingness to privately finance modernization proposals.
2. Consideration of a revision of guidelines to make the provision of Government-furnished plant equipment more directly related to new, major defense programs.
3. Improvement in the validity and review of justification and actual experience data, with particular attention to the commercial use of Government-furnished equipment.

4. A reexamination of the principle of recovery of savings through repricing of incentive-type contracts and subcontracts.

Agency comments

The Deputy Assistant Secretary agreed with **our** proposals and stated that it was DOD's policy that the contractor be encouraged to replace old, inefficient Government tools with more modern, efficient, privately owned tools. He indicated that current procedures would be modified to require the specific consideration of and a statement as to, the contractor's inability or unwillingness to finance equipment modernization.

The Deputy Assistant Secretary advised us that the Department would review the need to revise its guidelines as they apply to both new and existing major defense programs. He indicated that the problems highlighted in our report stemmed primarily from administration of the modernization program rather than from inadequate guidelines. He stated that such deficiencies would be corrected through a program to improve the technical competency of Government property administrators, which would require more detailed evaluations of the validity and review of justification and experience data at the local levels and workload projections far enough in the future to allow for administrative and procurement lead time.

The Deputy Assistant Secretary indicated also that the subject of recovery of savings under all types of contracts had been under consideration by the **ASPR** Committee for some time and that the views expressed by the General Accounting Office on recovery of savings in the repricing of incentive-type contracts were being considered by the Committee.

Transportation and installation costs

We noted at some contractor locations that the *costs* of installation and/or transportation associated with the acquisition of **IPE** had not been identified and recorded.

These circumstances are not in accordance with the accounting principles and standards prescribed by the Comptroller General of the United States providing that the basic costs of property shall reflect all costs associated with acquiring the assets in the place and form they are to be used and managed.

The ASPR, section 7-702.12, provides that, for rental computations, the cost of facilities shall include the cost of transportation and installation. We found that these costs had in some cases been applied as a percentage factor to the acquisition cost of **IPE** being rented by contractors. One contractor added a factor of 3.5 percent, another contractor added a factor of 1 percent. That these costs can be significant is illustrated by the fact that, in one case, a contractor increased the rental base for **IPE** by as much as \$800,000 through the addition of a factor for transportation and installation. At one contractor location where installation and transportation costs had not been recorded, rent was computed without the addition of a factor for these costs.

The ASPR authorizes contractors to use DD Form **1342** as the subsidiary property record for **IPE**, but the form does not provide for the costs of transportation and installation to be accumulated and recorded. Contractors sometimes rely on this record as a means of accounting control and as a basis for reporting.

Conclusions

We believe that the recording of such costs is necessary to provide reliable and visible cost experience data for property management decisions involving economic considerations such as those related to acquisition, redistribution, and disposal of these assets, as well as for rental calculations. In order to provide an accurate and uniform basis for accounting for Government-owned property, for management decisions, and for rental charges, we proposed that contracting practices and ASPR provisions be studied with the objective of providing a method for appropriately accumulating, recording, and reporting transportation and installation costs which are borne by the Government.

Agency comments

The Deputy Assistant Secretary agreed that, as a general principle, the cost of plant equipment should include the cost of transportation for delivery to the current installation site, including the cost of installation. Further, he stated that compliance with ASPR 7-702.12 made it necessary that the cost of plant equipment include the cost of transporting and installing plant equipment in the present location in Defense contractors' plants for the purpose of determining charges for use of the equipment. He stated that action would be taken to ensure compliance with this

requirement by amending ASPR after study of the most feasible way of obtaining equitable cost data by accounting or statistical methods.

Duplicate recordkeeping

The Navy is maintaining records of its IPE, which duplicate those maintained by contractors and DIPEC. The Naval Supply Center located in Bayonne, New Jersey, maintains records of Navy-owned IPE involving nearly 13,000 items of property for about 175 contractors. Similarly, the Naval Training Center, Great Lakes, Illinois, maintains records involving 22,600 items of Navy-owned IPE, which duplicate those of about 100 contractors.

Paragraphs 025307 and 036050 of the Navy Comptroller's Manual provide for this property accounting responsibility and paragraph 025307 indicates that there are a total of 21 naval activities which maintain records of Navy-owned IPE in the possession of contractors. We were told that these records serve as a control over Navy-owned IPE. Moreover, naval accounting activities are authorized to prepare monthly reconciliations of plant account (NAVCOMPT Form 167) which are sent to contractors, DIPEC, and the respective naval regional finance centers when changes occur during the month. Otherwise the reconciliations are prepared on a semiannual basis.

Conclusion

This recordkeeping, while required by Navy procedures, appears to be in conflict with ASPR B-301(a) which relates to control records maintained by a contractor for Government property. This section states, in part, that:

"*** It is the Government's policy to designate and use such records as the official contract records, and not to maintain duplicate property control records ***."

We proposed that a study be made of methods by which DIPEC records could be used for Navy property management purposes, with the objective of eliminating duplicate recordkeeping by the Navy, and that DOD investigate the possibility of similar duplications in the other military services.

Agency comments

The Deputy Assistant Secretary advised us that duplicate recordkeeping related to Navy-owned IPE in possession of contractors was being discontinued and that the requirement for records would be satisfied by reliance upon both the contractor and the DIPEC property records. He further stated that ASPR (apps. B and C) was being revised to prevent duplication of property records in all Defense agencies and, if other duplications were found in the military departments, corrective action would be initiated.

Real property

Our review of the accounting and control of Government-owned real property facilities being used by contractors was very limited. We did

find in a few instances that capital improvements to Government-owned real property were not properly reflected in asset accounts.

For example, replacement of a portion of the plant's electrical distribution system costing about \$104,100 was determined not to be of a capital nature because it replaced an existing system. We noted, however, that the capacity of the system to provide service was significantly greater after its installation and that the useful life of the property was extended by at least 10 years.

In another instance, an atmospherically-controlled room was constructed at a cost of about \$37,800 to house four gear machines and related test equipment but the cost was expensed because the room did not alter the exterior dimension of the plant.

In accounting for changes as described above, the accounting principles and standards prescribed by the Comptroller General provide that the cost of the replacement property will be capitalized and that the cost of features superseded or destroyed in the process will be removed from the property accounts.

We believe that it is important that guidelines be prescribed in sufficient depth to achieve accurate and uniform accounting treatment of such costs, so as to minimize inconsistencies in the records because of varying personal opinions.

Agency comments

The Deputy Assistant Secretary advised us that DOD would develop for inclusion in the ASPR necessary criteria for capitalizing or expensing costs incurred on Government real property in possession of Defense contractors.

SPECIAL TOOLING AND SPECIAL TEST EQUIPMENT

Weaknesses observed in controls over special tooling and special test equipment

Special tooling and special test equipment in the possession of contractors represent a significant investment by the Government. The estimated cost of this class of property at the contractors' plants visited amounted to more than \$347 million, or over one third of the cost of Government property in the possession of those contractors.

We found weaknesses in the control of this property due to deficiencies in inventory practices, absence of financial controls, and absence of a requirement for surveillance by Government property administrators of special tooling in possession of subcontractors. Also, in some instances, Government-owned tooling was not identifiable by physical markings or in property records.

In addition, we noted that, as of February 1965, Air Force reviews of tooling at contractor plants disclosed that items classified as special tooling included over 72,000 items valued at about \$84 million, which were facility-type or general-purpose items. Much of this property is adaptable to commercial purposes. Although our examination into the classification of tooling and test equipment was limited, we believe that the matter is of sufficient importance, particularly as evidence of the need for financial control of this property, that we have included our general observations in this section.

General information

The ASPR, under section B-103.14 which is incorporated in contracts by reference, defines special tooling, including special test equipment as items

"***of such a specialized nature that, without substantial modification or alteration, their use is limited to the production of such supplies or parts thereof, or the performance of such services, as are peculiar to the needs of the Government, ***"

The definition specifically excludes consumable small tools.¹

The ASPR states that it is the policy of DOD to have contractors furnish and retain title to special tooling required for the performance of Defense contracts wherever practicable. The ASPR points out that Government acquisition of title or the right to title in special tooling creates substantial administrative burdens, encumbers the competitive procurement process, and frequently results in the retention of special tooling without a clear advantage to the Government.

¹

This definition is somewhat different from that contained in section XIII of the ASPR which is included in the background section of this report. In Contract Administration Panel Case 64-310, a change is proposed to the ASPR which will conform the definition in appendix B to that included in section XIII.

The DOD has directed contracting officers to consider the particular circumstances of each procurement in determining whether the advantages of acquiring special tooling or rights thereto outweigh the disadvantages. In this connection, the ASPR states that, where there is not adequate price competition, the Government typically pays the full cost of the special tooling regardless of who owns or has rights to it and that therefore it is usually appropriate for the Government to acquire special tooling or rights thereto. The regulation states, however, that for fixed-price contracts where a certificate of current cost or pricing data is not required, special tooling or rights thereto shall not be acquired unless the contracting officer determines such acquisition to be advantageous to the Government.

The ASPR provides for varying degrees of control over Government-owned special tooling, depending on the contract under which it is acquired. These provisions are summarized as follows:

1. In formally advertised procurements, each item of special tooling to be acquired by the Government is clearly identified in the invitation for bids by separate item or by category if individual items are low in value. Generally, the Government takes title to such tooling when it is delivered by the contractor.
2. In cost-reimbursement-type contracts, title to all special tooling furnished by the Government remains in the Government and title to all special tooling purchased or fabricated by the contractor, the cost of which the contractor is entitled to be reimbursed, passes to and vests in the Government. Special tooling acquired under cost-reimbursement-type contracts is subject to property controls incorporated in the ASPR. These controls in part require that the contractor maintain records of special tooling and provide that a Government property administrator be assigned to ensure that the contractor does, in fact, maintain adequate control over the property.
3. In other negotiated procurements, each item of special tooling to be acquired is identified by separate item in the contract wherever practicable or by category if individual items are low in value. If such identification is impracticable, title to special tooling may be obtained through use of a special tooling clause prescribed in ASPR.

The special tooling clause provides that the contracting officer may request the contractor to provide, within 60 days after delivery of the first production end-items, a list of all special tooling acquired or manufactured by the contractor for use in the performance of the contract and provides also that, at the option of the contracting officer, the contractor, upon completion or termination of all or a substantial part of the work under the contract, shall furnish a final list in the same form covering all items not previously reported.

If the contracting officer requests a list of special tooling, he is required, among other things, to furnish the contractor information regarding the special tooling to which the Government desires to take title.

Prior to the time when the Government takes title, special tooling manufactured or acquired by a contractor under the provisions of the special tooling clause is not subject to the controls of appendix B and to surveillance by the property administrator. Instead, the contractor is required to follow its normal industrial practice in maintaining property control records for all special tooling. Once the Government has taken title, however, the tooling is subjected to the property control prescribed by appendix B, ASPR, and to surveillance by the property administrator.

Financial controls

The purpose of financial or monetary control accounts is to provide a reasonable measure of assurance that the detailed records reflect all transactions affecting the property and are accurately presented. The monetary control accounts which are maintained by individuals generally independent of those maintaining the detailed property records, summarize receipts, dispositions, and balances on a dollar basis. The assurance is provided by evidence of agreement between the control account and the aggregate of the detailed records.

Through independent inventory procedures, the physical status of the property as presented in the detailed records can be verified or differences disclosed--both in units and dollars--for management investigation and disposition. The ASPR prescribes only the maintenance of individual property records reflecting, among other things, description, price, and quantity of individual items of special tooling and special test equipment.

Our review revealed that the absence of a requirement for monetary control accounts precluded the collection of reliable financial information and, in our opinion, resulted in insufficient internal control for the protection of these assets.

For example, at one contractor's plant, the contractor maintained a perpetual inventory record for special tools acquired for production contracts. Several years ago, the Government had acquired \$55 million worth of special tooling at the contractor's plant. The contracts provided that the contractor would follow its normal industrial practice in maintaining property control records. The contractor was not maintaining monetary control accounts and the stock record cards included both contractor-owned and Government-owned tooling without designation of ownership and without indicating unit cost data. We could not determine from the records whether existing tooling is contractor or Government owned. The contractor indicated that, to identify Government-owned special tooling, a physical inventory would have to be taken and that 20 men would be required for such an inventory over a period of 1 full year.

At another contractor's plant, property record cards were prepared by tabulating machines for special tooling and special test equipment and were filed by Government contract numbers. The contractor was not maintaining monetary control accounts for special tooling. We requested the contractor to designate the value of Government-owned special tooling in its possession. The total cost of such property was estimated at \$19.2 million. This estimate was based on a count of a measured inch of property records and an

estimated average value for each of the items in that measured inch, applied to the total measurement of property records.

We have reviewed Contract Administration Panel Case 64-310 which contains proposed changes to the ASPR, and we find that these changes have not added a requirement for maintenance of monetary control accounts for special tooling and special test equipment.

Need for better identification

ASPR recognizes that special tooling should be properly marked and that records should disclose ownership and contract designation. It provides that, when the tools are commingled with those of a contractor, they be clearly identified and recorded as Government property. Additionally, ASPR states that the contractor's property control system shall provide, for each item of Government-owned special tooling, the contract number or equivalent code designation.

Our review at five contractor plants revealed that Government-owned special tooling was not readily identifiable.

We found at one contractor's plant that, some tools were not marked for identification and identification could be made only by reference to engineering drawings.

At the other plants, Government-owned tooling had been commingled with like items of contractor-owned tooling and identification as to ownership could not be readily determined because inventory record cards did not indicate who owned the tooling. To illustrate, we found at one contractor's plant, that records maintained for tools included those acquired at a cost of \$55 million under Government production contracts but did not identify the tooling as either contractor or Government owned. The identification of tooling ownership could be made only through physical examination of the tools and isolation of those bearing Government marks. Further, the tool records did not always show the location of the tool, which made identification of the special tooling more uncertain.

Physical inventories

The taking of physical inventories is a necessary check on the effectiveness of the contractors' systems through the identification and evaluation of the propriety of any differences between or changes in the amount of Government-owned special tooling and test equipment in their possession and that shown in the records. This important element of control is recognized both by ASPR and the accounting principles and standards prescribed by the Comptroller General. ASPR does not, however, specifically require periodic physical inventories but provides that it shall be the responsibility of the property administrator to review and approve the type and frequency of physical inventories to be taken,

We found that in some cases contractors were not taking physical inventories at regular intervals and that the Government property administrators had not required that the inventory be taken. In another case, we found that the contractor was employing poor inventory practices.

At one plant, Government-owned tooling originally acquired at a cost of \$55 million under supply contracts starting in 1952 had never been inventoried.

At another plant, the corporate policies and procedures, as approved by the Government property administrator, provided for a complete inventory of special tooling at least once a year. We found that physical inventories had been taken only at the completion or termination of contracts and that, as a result, items of significant amount acquired under other than facilities contracts had not been inventoried.

At a third plant, we found that the inventory taking had been limited to determining whether a particular item was on hand, without regard to the quantity of identical items that should be on hand,

We have reviewed Contract Administration Panel Case 64-310 which contains proposed changes to ASPR. Incorporated in the proposed changes is a requirement that "The contractor shall periodically physically inventory all Government property ***" and also that "*** the type and frequency of physical inventory and the procedures therefore shall be established by the contractor and approved by the property administrator ***." In our opinion, this proposed change, if properly implemented, will result in improved control over special tooling and special test equipment. We note, however, that the proposed change does not impose a requirement for appropriate segregation of duties to ensure independence in inventory taking. Thus, an important element of internal control is not prescribed.

Need for improved controls over special tooling provided to subcontractors

Under prevailing instruction in ASPR, the Government does not exercise surveillance over tooling provided by prime contractors to various subcontractors. Thus, the Government does not review the existence, condition, or use of this property unless the prime contractor or the Government property administrator at the location specifically requests the assistance of the Government property administrator having cognizance at the subcontractor's plant.

Our review of tooling in the hands of subcontractors revealed that financial accounting controls were lacking and that property records in the three cases we examined had omitted cost data. In one instance, the subcontractor had no written procedures for the control of special tooling. We found also that in some instances Government-owned tooling provided to the subcontractor had not been clearly identified and recorded and that physical inventories had not been taken.

We found that Government property administrators responsible for property at the subcontractor's plant did not review special tooling unless requested to do so by the property administrator assigned to the prime contractor's plant and that the property administrator had made very few requests of this nature. There were occasions, however, when the prime contractor had requested the subcontractor to verify special tooling in its custody.

Contract Administration Panel Case 64-310 which contains proposed changes to ASPR requires that the property administrator at the prime contractor's plant obtain from the contractor an agreement to utilize the services of a supporting property administrator having cognizance at the subcontractor's plant or a statement that the prime contractor elects to perform the property surveillance function at the subcontractor's plant with its own personnel.

Classification

An important aspect of control over tooling and test equipment is the classification assigned to such property, both initially and as it may be affected by subsequent changes in the manner of use.

We observed that the classification of general-purpose items as special tooling or special test equipment could result in the loss of rental payments for commercial use and in inadequate utilization. We also noted that classification of expendable items as special tooling and special test equipment may result in unnecessary costs of maintaining records and controls.

At one contractor's plant, we noted that the contractor had prepared a listing of multipurpose tools costing about \$36 million, which were classified as special tooling.

A report issued in March 1966 by the Air Force property administrator located at this plant stated:

"It was observed that identical items sitting side by side carried facility property tags in one instance and special tooling tags in another instance. This would reemphasize the need for a comprehensive review and reappraisal of the criteria for determining how and at what point these items were sorted into facilities or special tooling. The existence of complete machines built as special tools, articles attached to facilities or real property on a permanent or semi-permanent basis, items so general in nature and so obviously nonspecialized, and yet identified as special tooling makes an ambiguous and untenable situation."

The property administrator stated that the tooling in question was being used by the contractor on all programs without payment of rent and recommended that it be transferred to the facilities contract. Apparently as a result of the property administrator's recommendation, a pending lease agreement between the contractor and the Air Force provides for the payment of rent for commercial use of special tooling and test equipment costing about \$3.6 million. This amount was determined by the contractor by reviewing the list of standard tools comprising the \$36 million total previously mentioned and estimating the quantity and value of such tools that could be used for commercial purposes.

Because there was no itemized listing of the \$3.6 million of tooling which the contractor intended to use, it appears to us that any amount of

the \$36 million of tooling could be available to the contractor for commercial use. Although the lease agreement had not been executed at the time of our review, it appears that the standard tools are to retain their special tooling classification.

It should be noted that there may exist at numerous contractor plants conditions where Government-owned special tooling is common to both commercial and Government production requirements. For example, in a letter addressed to our office, a contractor stated in part:

"Aircraft engine production for the Defense Department in the late '50's softened considerably and the engine manufacturers, no doubt, sought further use of their product in Commercial aircraft. It must be remembered that these engines were almost identical to the Military versions and were made, for the most part, off of the same production tooling. In fact, parts could be made on the same line that would be used for either Military or Commercial aircraft."

Regarding the overall problem of proper classification, we found that the Air Force in 1962 recognized that large amounts of general purpose items were incorrectly classified as special tooling and initiated a comprehensive program to correct the situation.

In a letter dated September 17, 1962, the Director of Procurement Management, Headquarters, United States Air Force, stated that a review at five major contractor plants had disclosed that the Air Force had acquired a sizable inventory of facility-type items under supply contracts as special test equipment or other special equipment but that the Air Force lacked a program to control their use and ultimate disposition or to adequately control future acquisitions of such equipment. To correct this situation, the Director initiated a project called tooling inventory and disposal evaluation (TIDE). The purpose of project TIDE was to identify facility-type items that were misclassified as special tooling and to establish appropriate controls for such equipment.

As of February 28, 1965, according to an Air Force report, project TIDE had been completed at 2,079 contractor locations and had uncovered 72,428 items valued at \$84,326,000 that were facility-type or general-purpose items which had for various reasons been classified as special tooling. Further, of the items reclassified, 3,286 items valued at \$3,057,000 were determined to be excess to requirements of the holding contractor and were redistributed through shipment to other contractors for use or to Air Force activities for storage or use.

We also observed at one contractor's plant that many standard expendable items had been classified as special tooling. For example, we found that special tooling records were being maintained for general purpose drill bits costing about \$4 each. This practice is in conflict with the ASPR definition of special tooling, which excludes classification of consumable small tools as special tooling. In our opinion, the continued classification of standard expendable items as special tooling may result in unnecessary costs of maintaining records and controls.

The DOD has under consideration a proposal (Contract Administration Panel Case 65-19) to strengthen ASPR regarding the administration of special tooling. The proposal will require reclassification of a special tooling item to a facilities item when it acquires multipurpose characteristics. We believe that, if this proposal is incorporated in ASPR and effectively implemented, control over special tooling will be strengthened.

Conclusions

Special tooling and special test equipment represent a significant portion of the Government-owned property in the possession of contractors. In our opinion, the fact that the Government has taken title to such tooling and test equipment is evidence of its nature as property having sufficient value that it should be subjected to effective accounting control. As previously noted, some tooling is usable for many years--in some cases for commercial purposes. We think that the current and future adaptability of much of this tooling to commercial purposes is persuasive evidence of the need for financial controls over such property.

It is therefore our opinion that it is necessary for tooling and test equipment to be properly classified, identified, and accounted for to prevent unauthorized use and unrecognized loss and to provide information to facilitate intelligent decisionmaking in regard to acquisition, dispositions, rental, and transfers. Although the deficiencies discussed in this report did not exist at all of the contractor plants visited, we believe that their incidence at the locations we reviewed were sufficient to substantiate a need for improvement.

It appears that weaknesses relating to classification, identification, and control of special tooling in the possession of subcontractors can be corrected by greater attention, on the part of responsible Government personnel, to contractor compliance with existing sections of ASPR or in-process revisions thereof. The need for improved surveillance over Government-owned property by property administrators is discussed in the last section of this report.

It appears also that the weaknesses relating to periodic inventory taking will be corrected if the current proposal to change ASPR is implemented. We note, however, that the proposed change does not impose a requirement for appropriate segregation of duties to ensure independence in inventory taking. Accordingly, we proposed that such a requirement be included either in appendix B of ASPR or in the proposed ASPR appendix which prescribes the duties and responsibilities of the property administrators.

We recognize that financial accounting for special tooling is more complex than for some other classes of property and that an examination into the practical problems which may be associated with installation of such system was not possible within the scope of the current review. It is our opinion, however, that a system incorporating financial control of these assets is desirable and will be valuable as a tool of property management. We proposed, therefore, that the Department establish a study project to determine the procedures to be used and the point in the contracting process at which financial control of special tooling should be established.

Agency comments and our evaluation

The Deputy Assistant Secretary agreed that proper internal control procedures should include segregation of duties of responsible contractor personnel taking physical inventories of Government property and he indicated that the Department would review the desirability of making a revision to ASPR.

With regard to establishing a study project to determine the procedures to be used and the point at which financial control of special tooling should be established, the Deputy Assistant Secretary advised us that no change to the special tooling provision currently in ASPR was planned. He stated that, on the basis of prior experience of both the military departments and the commercial industry, special tooling had been and should continue to be considered as expendable (consumable) property and that the provision for detailing in each contract the special tooling required to produce end-items under the contract was considered an adequate basis of control. He stated also that, normally, special tooling was produced solely for a particular process or machine and that, upon determination by the contracting officer that this special tooling was no longer required by the Government, it should be disposed of in accordance with ASPR, section VIII, part 5.

We do not agree that the provision for detailing special tooling in each contract is an adequate basis for control. The preparation of such lists may be postponed indefinitely because a contracting officer may elect to waive the requirement until completion of the contract or subsequent follow-on production contracts. We noted one such instance where preparation of the lists was still pending for special tooling originating in 1952. Also, disposal of special tooling according to ASPR, section VIII, part 5, when it is no longer required is not responsive to the matters set forth in our report inasmuch as we are concerned with control (1) while the tooling still has utility to the Government and sale or rental value for commercial purposes and (2) to ensure the integrity of special tooling at such time as a subsequent decision is made to sell or otherwise dispose of it.

The Deputy Assistant Secretary's position that special tooling is expendable is at variance with Air Force reviews which established that much tooling was, in fact, facility-type items. ASPR requires that such facility-type items be under financial control. The Government has provided special tooling under major defense programs, to the aircraft engine and air frame industries. Subsequently, the introduction and manufacture of substantially similar products for commercial uses has resulted in additional uses for much of this tooling. For example, the Air Force sold its KC-135 special tooling to a contractor because the items could be applied to similar commercial airplanes.

Special tooling at the 11 aircraft engine and air frame contractors included in our review had a total approximate acquisition cost in excess of \$299 million and at five of these contractors we established that portions of the special tooling had been used at one time or was currently being used for the manufacture of commercial components. The items which we question have long-term value and in some cases have multiuse

characteristics. We believe that timely determinations regarding the classification of special tooling as facility-type items is essential and that careful control of special tooling under a system of financial control accounts is needed.

Recommendations

We recommend that the Secretary of Defense establish a study project to determine the procedures to be used and the point in the contracting process at which financial control of special tooling should be maintained. Also, we recommend that periodic examinations be made of special tooling to identify multiuse characteristics and that the items identified be reclassified and controlled as facility-type items.

MATERIAL

Accounting systems to control Government material need improvements

The accounting systems employed by contractors did not provide for financial control and acceptable physical inventories of Government-owned material. We attribute the weaknesses to indefinite instructions existing in ASPR, deficient physical inventory taking, and departure from good property management practices. The physical protection and security procedures were, with one exception, adequate to protect the Government-owned material at the plants we examined. To alleviate the inadequacy, the contractor agreed to reduce from 26 to 8 the number of employees having access to storage areas.

Financial accounting controls not maintained--Government-owned material at six contractor plants was not controlled under monetary accounts. ASPR assigns to contractors the responsibility for maintaining an adequate property control system, without clearly establishing the essential characteristics of such a system. The existence of stock record cards was usually considered to be sufficient to comply with ASPR, and these were not tied into a monetary control account. We found that contractors maintained individual property records showing description, issues, receipts, balance on hand, and price of the material. This was in accordance with ASPR, which does not require monetary control accounts for this property.¹

In one case differences between unit records and stocks actually on hand were adjusted by requisitions which were not authorized according to the contractor's property control procedures. We found that, during the first quarter of 1966, over \$2,800 of Government-owned material was written off of the inventory records in this manner. Furthermore, the write-offs were not reported to the Government property administrator.

We could not ascertain the causes of the discrepancies at the time of our subsequent review. However, financial control accounts would expose a number of types of discrepancies which would cause differences between the stocks on hand and the records; and exposure could be made in such a way as to permit timely investigation of the reason for the differences. Furthermore, financial control accounts would facilitate an accurate reporting of the dollar amount of inventory write-offs for purposes of investigations by management.

One contractor official, who estimated that several million dollars worth of Government-furnished material was on hand at his plant, stated that monetary controls for the Government-furnished material were impractical and that the contractor was primarily concerned with only quantities. Nevertheless this contractor maintained monetary controls over its own materials inventories.

¹A description of monetary control accounts and their manner of use was previously discussed in this report, page 48.

We have reviewed Contract Administration Panel Case 64-210, which contains proposed changes to ASPR, and we find that these changes have not added a requirement for maintenance of monetary control accounts for material.

Inventory taking ineffective--The physical inventory-taking procedures contained deficiencies, of varying significance, at 7 of the 10 contractors' plants where we examined material. In some cases adequate internal control did not exist because the taking of the inventory did not incorporate appropriate segregation of duties of participating personnel. For example, at one location, the individual who maintained the stock records was custodian of the material, and he also took inventory. In such cases differences between the records and the physical count can be reconciled by adjusting the records or removing the stock cards, without independent evaluation of the propriety of the transactions.

The inventory taking was incomplete in some cases because it was limited to verifying listings prepared from the property records and furnished to participating personnel; therefore, items which may have been physically on hand but not included on the listings provided would be omitted from the count,

At one location the contractor performed a physical inventory of Government-furnished material but did not require a physical inventory of material it had acquired for the account of the Government. Also, in a few cases, written procedures were lacking, the work was not properly documented, the results were not furnished to the Government, or inventories were not priced out.

We have reviewed Contract Administration Panel Case 64-310, which contains proposed changes to ASPR. Incorporated in the proposed changes is a requirement that "The contractor shall periodically physically inventory all Government property ***" and also that "The type and frequency of physical inventory and the procedures therefor shall be established by the contractor and approved by the property administrator." In our opinion this proposed change, if properly implemented, will result in improved control over material. We note, however, that the proposed change does not impose a requirement for appropriate segregation of duties to ensure independence in inventory taking, thus an important element of internal control over these assets is absent.

Conclusions

ASPR does not require that financial accounting controls be maintained for Government-owned material in the possession of contractors. It is our opinion that a system incorporating financial control of materials in the possession of contractors is desirable and would be advantageous as a tool of property management. We proposed, therefore, that ASPR B-304.7 be amended to require financial accounting controls for Government-owned material in the possession of contractors in order to ensure adequate control and safeguarding of the assets and reliable reporting of the amounts on hand.

The internal control weakness noted with respect to the taking of physical inventories without appropriate segregation of the duties of participating personnel has not been corrected under the proposed ASPR change. We proposed, therefore, that the ASPR be strengthened by providing for appropriate segregation of duties of personnel participating in the physical inventories of materials.

Agency comments and our evaluation

The Deputy Assistant Secretary indicated that financial controls for material have been the subject of study for many years in DOD and that these studies are being continued. In addition, he stated that a proposal will be submitted for consideration by the ASPR Committee for criteria to establish contractor requirements for accounting for contractor-acquired Government material. He further indicated that a segregation of duties of responsible contractor personnel will be required during the physical taking of inventories.

We were also advised by the Deputy Assistant Secretary that DOD is currently revising its procedures to exclude from the previous definition of Government-furnished material those items sent to contractors for processing and return. Accounting for these items will be performed by the cognizant inventory control point or other activity of the DOD component, in both quantitative and monetary terms. Although the contractor will be required to keep item records for scheduling purposes, he will be relieved of financial property accounting.

We acknowledge that DOD has taken constructive steps to improve the administration of Government-owned material in the hands of contractors, but we believe the records and controls maintained by the contractor over this property should be at least as good as those maintained over its own material. Also, since DOD studies have been proceeding for many years, a timetable should be established and responsibility fixed for a solution to the problem.

Recommendation

We recommend to the Secretary of Defense that ASPR B-304.7 be amended to require financial accounting controls for Government-owned material in the possession of contractors.

NONPROFIT INSTITUTIONS

Property administration at universities

Our review revealed that financial control accounts were not required by ASPR to be maintained by nonprofit institutions, including universities, for IPE and special test equipment, nor were they maintained by the two universities we visited. At one university this resulted in the loss of monetary and quantitative control over at least \$52,000 worth of Government property. We also found that periodic inventories were not required by ASPR, nor were they taken by the universities even though research contracts frequently had been in process for several years and that, when inventories were taken, the procedures employed did not provide necessary internal control.

Further, we found that ASPR requirements were not being adhered to with regard to control of property by DIPEC. As a result (1) IPE at a cost of about \$260,400 was purchased in fiscal year 1966, without DIPEC's inventories first being screened to determine whether acceptable IPE was on hand and available, (2) DIPEC's central inventory files were incomplete because \$1.1 million of IPE on hand at the universities was not reported to DIPEC, and (3) during fiscal years 1965 and 1966, IPE in critical or short supply having a cost of \$104,700 was donated to the universities, without first screening DIPEC records to determine whether the equipment was needed elsewhere in the Government.

Property accounting system needs improvement--We found that ASPR does not require monetary control accounts and such accounts were not maintained. As stated previously in this report, monetary control accounts are accounts which are maintained by individuals independent of those maintaining the detailed property records, and the accounts summarize receipts, dispositions and balances on a dollar basis to ensure of accuracy and completeness of the detailed records. We also found that internal control was lacking in the inventory procedures used by the universities.

At one of the universities we reviewed, we tested acquisitions of Government-owned property amounting to \$156,000 and we found that \$52,000 of this amount had not been recorded on property cards. As a result, quantitative control over this property was also lacking. If a monetary control account had been maintained by the university, this omission would probably have been discovered when postings on detailed property records were reconciled with the monetary control account balance.

We have reviewed Contract Administration Panel Case 64-310 which contains proposed revisions to ASPR and we found that a change is being contemplated which appears to require a monetary control account for facilities. However, no such requirement is included for special test equipment.

With regard to inventory taking, ASPR permits the Government property administrator to request the universities to perform periodic inventories, but physical inventories are mandatory only upon contract completion. We found that the Government property administrators had not requested periodic physical inventories and that generally they had not been taken even

though research contracts frequently had been in process for several years. Physical inventories were generally taken only upon completion of the contract as prescribed.

We also found that, when physical inventories were taken at the completion of contracts, procedures did not provide for appropriate segregation of duties of personnel. At both locations inventories were taken, by personnel having custody of the property, through verification of a list of the property, prepared in advance from the property records and furnished to participating personnel. Thus independent verification, an important element of internal control of the assets, was absent.

A proposed change to ASPR which is incorporated in Contract Administration Panel Case 64-310 would require the universities to periodically physically inventory Government property and prescribes that the type and frequency of physical inventory and the procedures therefor shall be established by the contractor and approved by the property administrator.

We note, however, that the proposed change does not require appropriate segregation of duties of personnel participating in the inventory taking.

Need to coordinate IPE purchases, dispositions, and inventory on hand at universities with those of DIPEC--DOD has established an extensive system, administered by DIPEC, to ensure maximum reutilization of IPE, prevent unnecessary procurement of IPE, and maintain a central inventory of IPE, including listings of critically short items. To operate this system, ASPR requires (1) screening of DIPEC assets prior to acquisition of IPE and (2) reporting IPE on hand to DIPEC.

Our review has shown that (1) DOD agencies generally approved the universities' requests to purchase IPE, without first determining whether like items were available for use from the DIPEC inventory, (2) all Government-owned IPE in the possession of the universities had not been reported to DIPEC, and (3) DOD agencies were donating IPE to universities, without first screening DIPEC records for a determination as to whether the equipment could be utilized elsewhere.

DIPEC inventory not screened prior to acquisitions--Our review showed that, generally, DOD agencies approved the universities' requests to purchase IPE, without determining whether acceptable IPE was available through DIPEC.

At the two locations reviewed, we identified 56 items purchased in fiscal year 1966 at a cost of about \$260,400 for which DOD components had not required screening at DIPEC even though screening is required by Section XIII of ASPR. We were informed by DOD and university officials that it was their belief that DIPEC could not supply the equipment required by the universities, especially within the delivery time desired. The 56 items we identified are of the type that is reportable to DIPEC.

Inventory on hand not reported to DIPEC--We found that Government-owned IPE purchased by the universities at a cost of about \$1.1million

was not reported to DIPEC, even though reporting is required by ASPR, for inventory and control purposes.

We also found that, at one location, the Government property administrator had discussed with university officials the omission of reporting but had not obtained assurance that the equipment would be reported. In another case we were told that IPE had not been reported to DIPEC because at semiannual intervals the university requested and obtained title to certain of the items.

TPE was donated to universities, without DIPEC's records first being screened--DOD is permitted, under the authority of 42 U.S.C. 1892, to vest in nonprofit institutions title to certain equipment purchased with research funds. Our review of the House Report 2640, dated August 15, 1958, revealed that the provisions of the law were intended to minimize the cost of maintaining property records and needlessly circularizing lists of highly specialized equipment, particularly minor equipment. Further, testimony given in the House of Representatives' hearings states that 42 U.S.C. 1892, was not intended to increase Federal expenditures or to subsidize the recipients, nor was it intended that title to Government-owned equipment be transferred if the equipment were needed elsewhere in the Government.

ASPR provides the criteria to be used by contracting officers in determining whether Government-owned property should be donated under the authority of 42 U.S.C. 1892. The criteria requires in part that property should be donated to universities if either the retention of title in the Government would create an administrative burden not warranted by the value of the equipment or the keeping of inventory and records by the contractor would become prohibitively complicated or expensive. The ASPR criteria also provides that transfer of title should be made if "the transfer of title is not precluded by controls governing the equipment involved."

Our review showed that one type of controlled property, that which is subject to control by DIPEC, was being donated to the universities, without DIPEC's records first being screened to determine whether the equipment was needed elsewhere in the Government. Further, we noted that DOD components transferred title to equipment which was considered by DIPEC to be in short or critical supply. For example:

We found that, during fiscal years 1965 and 1966, DOD components transferred title to 36 items of equipment, having a cost of \$104,700, which DIPEC considered in short or critical supply. At one university the equipment transferred included 24 items of general purpose test equipment, such as oscilloscopes, signal generators, and recorders for which DIPEC had a total of 258 requests for identical and/or similar equipment from other DOD agencies, which could not be satisfied.

We also found that at the same time DOD components were donating items to universities which were subject to the control of DIPEC, they were retaining title to many items costing less than \$200. DIPEC-controlled items have an acquisition cost of \$1,000 or more. We note, however, that a recent ASPR revision states that title to equipment with a cost of less

than \$200 shall be vested in the universities upon purchase of this equipment.

We believe that the current provisions of ASPR which provide criteria for those items to be donated to universities could be made clearer and thus more effective if the criteria specifically excluded DIPEC-controlled items from the donation process. We have reviewed proposed changes to ASPR, and we find that no change to the current criteria is contemplated.

Conclusions

The proposed change to ASPR, requiring periodic inventory taking, should, if properly implemented, result in more effective control over Government-owned property in the possession of universities. We note, however, that the proposed change does not impose a requirement for adequate internal control through appropriate segregation of functions in taking physical inventory. We therefore proposed that such a requirement be incorporated at an appropriate place in appendix C or the new appendix of ASPR, which prescribes the responsibilities and duties of property administrators.

We believe that an effective property accounting system should also include monetary control accounts for Government-owned industrial plant equipment, and special test equipment in the possession of the universities; and we proposed that appendix C of ASPR be strengthened by requiring such financial accounting control of such Government-owned property at nonprofit institutions.

We also believe that, to avoid the possibility of unnecessary procurements, the DIPEC inventory should be screened, prior to approving the purchase of new IPE by universities and that TPE on hand at the universities should also be reported to DIPEC, as required by ASPR. We believe that, to achieve these objectives, it will be necessary for Government property administration surveillance to be more thorough to assure that existing procedures are adhered to, and we proposed increased management effort on these matters.

We believe that transferring of title to universities of industrial plant equipment which is in short or critical supply creates a potential for increased Federal expenditures, since other DOD users may be purchasing equipment of similar capability. We proposed, therefore, that DOD adopt more specific criteria regarding "controlled" equipment which is not to be transferred to universities (ASPR 4-214.4), particularly with respect to its application to industrial plant equipment controlled by DIPEC.

Agency comments and our evaluation

The Deputy Assistant Secretary advised us that, although paragraph C211.6, appendix C, Manual for Control of Government Property in Possession of Nonprofit Research and Development Contractors, requires colleges and universities to maintain financial accounts for Government-owned real property and plant equipment, there has been a failure to exercise compliance with the requirement. He indicated that the

Department will take necessary steps to ensure compliance. With respect to financial accounting for special test equipment provided nonprofit contractors, the Deputy Assistant Secretary stated that it was DOD's policy to charge these items as operating costs to initial contracts and it did not feel it desirable to require financial accounting for them. Concerning the taking of physical inventories, the Deputy Assistant Secretary concurred that appropriate segregation of duties is needed for proper internal control and he indicated that the Department will review the desirability of an ASPR revision.

The Deputy Assistant Secretary agreed that IPE costing over \$1,000 a unit should be reported to DIPEC for management and control purposes. He further stated that available IPE of this type should be screened for utilization prior to its being donated to the nonprofit contractor under provisions of 42 U.S.C. 1892 and that a revision to DSA regulations and ASPR designed to meet this objective would be processed.

The language in paragraph C211.6, appendix C, states that "The contractor's property control system should be such as to provide semiannually the dollar amount of Government-owned industrial facilities ***." (Under-scoring supplied.) Thus, as we interpret it, monetary controls are permissive rather than mandatory. Further, paragraph C211.6 is under the "Physical Inventories" paragraph, which, we believe, confuses application of the instruction. Contract Administration Panel Case 64-310 revises the wording from "should" to "shall" and this instruction has been placed under part 3--Records of Government Property, paragraph C-301, General. As such, the contemplated change to ASPR appears to require a monetary control account for facilities.

Special test equipment at universities at times consists of an assembly of standard items which include DIPEC-controlled-type items. These standard items have been classified as special test equipment because of their specialized nature once they are integrated with other components into complex laboratory set-ups.

Recommendations

To achieve effective accounting control over Government-owned property at nonprofit institutions, we recommend to the Secretary of Defense that ASPR be revised to clearly establish the need for monetary control accounts for IPE. We further recommend that standard IPE now classified as special test equipment be reclassified and controlled as facility-type items. Also, we recommend that special test equipment be accounted for under monetary control accounts.

PROPERTY MANAGEMENT FUNCTIONS IN THE DOD

Areas for improvement in administration of Government-owned property in possession of contractors

Appendices B and C of the ASPR provide that the contractor will maintain the official records of Government property in its possession. ASPR further provides that the contractor's property accounting system must be submitted to the property administrator for approval. ASPR also requires that the property administrator periodically test the contractor's system to ensure that adequate control exists over Government-owned property.

We found that the value of the approval process as a means to ensure adequate control over Government-owned property was questionable because (1) there was little incentive for the contractor to maintain an approved system and (2) contractor systems were allowed to continue in an approved status even though the property administrator had found a significant weakness in the contractor's control over property, which was not subsequently corrected, or, when other weaknesses were, in our opinion, apparent and should have been corrected. We found that the property administrators' examinations either did not disclose many of the conditions discussed throughout this report, which, in our opinion, were unsatisfactory, or did not produce effective corrective measures. Further, we noted that in some cases the property administrator did not adequately document his work.

We also found that, for the past 1-1/2 years, relatively few internal audits have been made of the effectiveness of property administration at contractors' plants. In addition, audits that were made regarding the adequacy of rental payment were, in our opinion, not sufficiently comprehensive to be fully effective.

DOD has taken or is in the process of taking action to improve the quality of the work of property administrators and internal auditors. For example, a recent policy decision appears to have established the responsibility for audit of the administration of Government property. Also, the Department has in process a new ASPR section which is expected to more clearly establish the responsibilities and duties of Government property administrators.

Property administrators' surveillance

and approval of systems--Our review showed that the property administrator had withheld approval to systems employed at 5 of the 19 contractors in our review. Further, we found that ASPR does not provide an incentive for the contractor to maintain an approved system. For example:

At one location we reviewed, the contractor's system was disapproved in July 1962 because the contractor's property control procedures were not adequate. In January 1965, the property administrator again reviewed the contractor's manual for control over Government property and reported to the contractor that the manual was "*** sadly lacking detail ***," and approval of the system was withheld. Since approval of the contractor's system had already been withheld no further action

was taken against the contractor. At the time of our review the contractor still did not have an approved system.

At another location, the system was disapproved in November 1966 because the property administrator found that the contractor's system for control of Government property was deficient in areas related to disposition, acquisition, recordkeeping, and inventory taking. Further, it was at this location that we found that the contractor had not reported 12 items of IPE which cost about \$400,600 and had been idle for about 2 years, for possible reallocation by DIPEC. As indicated, the only action taken was to withdraw approval of the system.

We also noted instances where the contractor's system was allowed to continue in an approved status even though the property administrator had found a significant weakness in the contractor's control over property, which was not subsequently corrected, or, when other weaknesses were, in our opinion, apparent, and should have been corrected. For example:

The property control system at one of the universities we reviewed was approved in December 1959 and was again reviewed by the property administrator in August 1966 and found to be adequate. We found that IPE purchased by the university was not reported to DIPEC for its inventory and control purposes even though reporting was required by ASPR. The Government property administrator was aware of this situation and discussed the matter of nonreporting with university officials, but he did not obtain assurance that the equipment would be reported. The approval status of the university's system was not changed.

At another location, we noted that the property administrator approved in January 1964 the contractor's property control system which required a quarterly review of usage records to detect idle equipment. We found that the contractor was not following this procedure, nor had the property administrator required the contractor to do so. We made an analysis of the utilization data and, on the basis of use criteria prescribed by DOD, we questioned retention of 59 items of IPE costing about \$859,000. During the time of our review, the contractor declared excess or was considering for disposal eight of the items costing about \$111,300. The approval status of the contractor's system was not changed.

At a third location, we found that the contractor's system had been approved in August 1962. Selective floor checks conducted by the Government property administrator at month-end showed numerous instances where, during a 2-year period, commercial work was performed on IPE, which the contractor had not included in his monthly request to the Government plant representative. Although corrective action was promised, we noted that incidence of discrepancies rose from 7.5 percent of the IPE tested in late 1964 and early 1965, to 13.5 percent of the IPE tested during the first 9 months of 1966.

Documentation by the Property Administrator--In March 1966 we reported to the Subcommittee on Federal Procurement and Regulation, Joint Economic

Committee, that one of the military services regulations specifies that ~~***~~ the file of work-papers prepared by the property administrator shall be relied upon as one of the most important indications of the effectiveness of the property administrator's work. ~~***~~, We reported also that the documentation of the results of the property administrator's property system surveys were inadequate at contractors' plants we visited. Our current review showed some cases where the documentation was adequate and other cases where it was inadequate.

We found that where the property administrator failed to document his work, we could not evaluate the quality and effectiveness of his surveillance examinations. For example:

At one location, we noted that the sole evidence supporting the property administrator's system survey was a two-paragraph letter of approval of the system. At another location, where the property administrator reviewed the property control system, no formal documents or workpapers had been prepared, and the evidence of such a review was limited to a notation in the control file.

DOD audit efforts--The "Accounting Principles and Standards for Federal Agencies," published by the Comptroller General, provides that all performance should be subject to adequate review under an effective internal audit program so as to provide information as to whether performance is effective, efficient, and economical.

Our review showed that, for the past 1-1/2 years, relatively few internal audits have been made of the effectiveness of property administration at contractors' plants. Further, we found that audits that were made regarding the adequacy of rental payment were, in our opinion, not sufficiently comprehensive to be very effective.

Since July 1965, the date when the Defense Contract Audit Agency (DCAA) was established, only a few internal audits have been performed regarding the effectiveness of control over Government-owned property. The reason for this is that DCAA, as a matter of policy, does not audit the effectiveness of their "client" which includes the contracting officer and the property administrator. Further, we were informed that, because of DOD's desire to have one audit agency deal with contractors, internal auditors assigned to the military services and DSA were not permitted access to contractors records.¹ These circumstances resulted in little internal audit effort being applied toward the effectiveness of contract administration of which property administration is a part. For example:

At one plant the most recent audit of the property control system and the property administrator's activity was made in April 1964 by the Resident Air Force audit staff. At another location we were informed

¹An exception to this policy occurred in late 1965 and early 1966 when DSA was permitted to conduct an audit at several contractors' plants. The results of the agency audit were transmitted to the Subcommittee in March 1966.

that an audit of the property control system had not been made for at least 6 years. At a third location the most recent audit of the property control system was made by the Navy Area Audit Office in May 1964.

In a memorandum to the Deputy Comptroller for Audit Policy, OASD (Comptroller) dated March 22, 1966, the DSA Auditor General indicated the importance of internal audit of contract administration. He noted that internal audit organizations should have access to contractor-maintained records because such access is necessary to determine techniques used by property administrators and to provide assurance that property is properly identified and adequately protected and that utilization is authorized and retention by the contractor is justified. He further indicated that DSA and DCAA could perform most effectively with internal audit's assuming no prerogative of the DCAA for contractor review and with DCAA's assuming no responsibility of internal audit of contract administration.

With regard to audit of contractor rental payments for use of Government-owned facilities, we found that the DCAA reviews were generally limited to (1) verifying the accuracy of data in the computations submitted by the contractor and (2) determining whether the procedure for computing the rent was in accordance with the contract formula. An evaluation as to whether the prevailing terms of the lease were equitable to the Government was not apparent (see p. 29). As discussed in previous sections of this report, we found a number of lease arrangements which, in our opinion, were inequitable to the Government.

Further, at one location we found that DCAA did not consider the question of whether the Government obtained the benefits of rent-free use of the IPE for its procurements. At this location the contractor had orders from nine different customers for 2.75 rocket base blanks, and all were paying rent for use of the Government IPE even though they were entitled to a rent-free waiver. In one of the cases the customer was a Government procurement agency. After we informed the contractor of this situation, it told us that the customers would be advised of the rent-free aspect in the future.

Agency actions and our evaluation

Some actions have been or are being taken by DOD to provide more definitive guidelines in the conduct of the property administrators' surveillance of contractor systems and to improve the quality of property administrators and internal audit effort.

In our March 1966 report to the Subcommittee, we referred to the preparation of a comprehensive manual for control of Government property which was in process. This proposed addition to ASPR is still under active consideration. This revision specifies the duties and responsibilities of the Government property administrator and defines the position of property administration within contract administration.

As discussed earlier in our report, the proposed requirements that contractors furnish utilization data for Government-owned IPE would

provide an effective tool for management of the property. We believe that the property administrator's guidelines should require that this data be analyzed and compared to usage standards and criteria to identify IPE which should be reallocated to fill other DOD needs.

Also, we believe that the guidelines should include a description of the essential characteristics of an adequate property control system. We believe this is necessary in order to make the required evaluations. For example, one essential of a control system should be to segregate review responsibilities from the recording of transactions, i.e., the physical inventory procedures should include appropriate segregation of duties. Other requirements are the establishment of monetary control accounts, and periodic reconciliation to the detailed records. Further, we note that proposed changes to ASPR, which affect property administration, do not provide incentives for contractors to maintain an acceptable property control system.

During our review we observed instances where apparently qualified personnel had left their positions as property administrators because the field offered no long-term career in the middle management classified grades of GS-12 and GS-13. Adequate internal control over Government property resources goes beyond prescribing policies and comprehensive procedures in regulations and guidelines. It includes personnel having qualifications commensurate with their responsibilities and requisite employee training programs.

In our March **1966** report to the Subcommittee we cited a **1963** management study indicating that the Air Force had been unable to employ and retain the caliber of personnel needed to adequately perform the duties and responsibilities assigned to the property administrator. The study proposed to improve the quality of the work by upgrading the assigned personnel. During our current review we noted that the Air Force has begun a program to upgrade the property administration function through the establishment of revised interim classification standards to provide career development and retention of qualified property administrators. This program also includes training courses in furthering professional development of employees.

We also have noted that the Defense Supply Agency, to which most property administrators are assigned, has been considering a proposed guideline to supplement the Civil Service Commission's standard for the Industrial Property Administration Series of positions.

With regard to internal audit effort, the Office of the Assistant Secretary of Defense (Comptroller) in a memorandum to DSA and the military services, issued on December 27, **1966**, established clear lines of audit policy which provided that prime responsibility for audit of the administration of Government property, including that furnished to contractors, is a part of the internal audit mission of the military services and DSA. DCAA's primary role will be to provide accounting and financial management advisory services regarding contracts and subcontracts to all DOD components. We believe that the guidelines set forth under this policy are essential and, if effectively implemented, will significantly improve the administration of Government property.

Conclusions

Actions taken or contemplated by DOD should, generally, improve the system of control over Government-owned property in the possession of contractors. However, regarding these changes we proposed that:

1. DOD place continuing emphasis on efforts to upgrade and improve the quality of property administrators and thus the effectiveness of surveillance.
2. DOD consider what appropriate incentives should be provided to encourage the establishment and maintenance, by contractors, of approved systems for control over Government-owned property.
3. DOD initiate an effective program of internal audit of property administration.

We believe that, in general, it is reasonable that accounting principles and standards applicable to Government-owned property in possession of contractors should be at least equivalent to the generally accepted principles and standards applied in normal industrial practices, appropriate to the circumstances, for accountability and control of a contractor's own property. However, more exacting standards may be appropriate under certain conditions where dictated by peculiar requirements of public legislation or the Department of Defense.

We proposed, therefore, that the new ASPR section, which defines the duties and responsibilities of Government property administrators, incorporate a policy statement to this effect for the guidance of such officials.

Agency comments

The Deputy Assistant Secretary stated that DOD had established a joint study project to evaluate current position classification standards for property administrators (GS-1103), establish position guidelines supplementing those of the Civil Service Commission, and provide qualification and performance standards. With regard to approving contractor property accounting systems for control over Government-owned property, the Deputy Assistant Secretary indicated that a specific ASPR (see apps. B and C) requirement for annual review of contractor property accounting systems is needed and that the ASPR Committee is considering adoption of such a requirement for both commercial and nonprofit contractors. He stated also that scheduled or planned internal audits by agencies and military departments and **DSA** should achieve the necessary audit coverage of property administration.

The Deputy Assistant Secretary concurred in our proposal that it would be reasonable to expect that those accounting principles and standards applicable to Government-owned property in possession of contractors should be equivalent to those applied in normal industrial practices. He indicated that the new ASPR supplement, covering the duties and responsibilities of the property administrator, would be amended accordingly. He

stated that, if more exacting standards than sound industrial practices should be necessary, the requirement would be established by contract provision.

APPENDIXES



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

INSTALLATIONS AND LOGISTICS

7 AUG 1967

Mr. William A. Newman, Jr.
Director, Defense Division
U. S. General Accounting Office
Washington, D. C. 20548

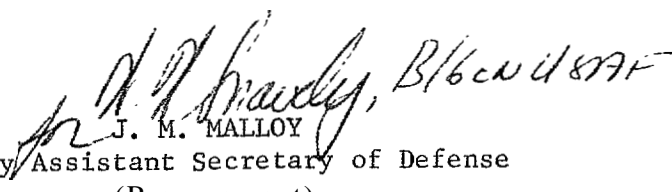
Dear Mr. Newman:

This is in response to your letter dated May 1, 1967 to the Secretary of Defense inclosing copies of a draft report to the Congress of the United States, on Review of Controls over Government-owned Property in the Possession of Contractors. (OSD #2603)

The report is designed to assist the Department of Defense (DOD) in improving the accounting and control of Government-owned property in the possession of contractors. Our comments on each of the 14 recommendations are attached for your consideration prior to submitting the final report to Congress.

We appreciate your interest and help in this matter.

Sincerely yours,


J. M. MALLOY
Deputy Assistant Secretary of Defense
(Procurement)

1 Atch
a/s

GAB Note: Portions of this letter have been deleted because they are no longer relevant to the matters discussed in this report.

DEPARTMENT OF DEFENSE

COMMENTS ON GENERAL ACCOUNTING OFFICE REPORT

"Review of
Controls over Government-owned Property
in the Possession of Contractors"

1. RECOMMENDATION: ~~We~~ are therefore recommending to the Secretary of Defense that provisions of proposed ASPR changes be revised to meet the predominant need of providing utilization records and a means of analysis of whether the extent and manner of use of Government IPE is satisfactory.

(Deleted)

COMMENT :-

The Armed Services Procurement Regulation (ASPR) is being revised to prescribe that the contractor be required contractually to establish and maintain a written system for controlling utilization of IPE. It also establishes the responsibility for each Contract Administration activity, and other DOD components, to conduct property system surveys to insure the effectiveness of **such** a system, and to show the extent and manner of use of Government-owned IPE. Finally, it provides for control, detection, and reporting of Government-owned IPE which is not being effectively and economically utilized by Defense contractors. This case is now receiving **a** comprehensive review throughout the Department of Defense (DOD), and by selected industrial associations.

Also, we will study the feasibility of maintaining utilization records on a machine-by-machine basis, **as** for example, IPE of selected high value. If our study proves the practicality of such **an** approach the ASPR **will** be modified accordingly.

2. RECOMMENDATION: We are recommending to the Secretary of Defense that DIPEC's management controls be reviewed, and new or additional directives be initiated-where required to insure that all equipment which could be utilized to meet anticipated needs is considered, and that suitable equipment is offered to authorized requisitioners in each instance when it is available. In this connection we are recommending that a program of personnel training and supervisory review be instituted to assure adherence to established policy and procedures.

(Deleted)

COMMENT:

Defense Supply Agency (DSA) Manual 4215.1, "Defense Industrial Plant Equipment Center (DIPEC) Operations", contains DOD policies, procedures and systems *for* reporting idle **IPE** and for submitting screening requirements. When screening by DIPEC results in a determination of non-availability, or an item is allocated and then rejected for valid reasons, DIPEC issues a Certificate of Non-Availability.

(Deleted)

COMMENT #2 CONTINUED

DIPEC has established a training program for all DIPEC commodity managers. Particular emphasis is being placed on the requirement to document the issuance of Certificates of Non-Availability or other specific conditions under which items in inventory are rejected as unsuitable for the intended use.

3. RECOMMENDATION: We are recommending that ASPR 13-405 be clarified 'to show that prior approval is to be made on a machine-by-machine basis and that the term "25 percent non-Government use" be more precisely defined. In addition, we are recommending that ASPR be clarified to differentiate OEP approvals from local monthly approvals for rental purposes.

(Deleted)

COMMENT -

A requirement for prior approval by the Office of Emergency Planning (OEP) on a machine-by-machine basis for commercial use over 25 percent per machine would create a substantial administrative burden not commensurate with the goals sought to be achieved. To maintain a factual utilization record by individual machine for commingled Government and contractor-owned plant equipment on a contract-by-contract basis is impractical. **It would be** very time consuming, disrupt the contractor's production planning process, and result in the addition of a costly administrative burden for both Government and Industry. A more practical approach, which we are pursuing, is one of more aggressive surveillance, maximum use of all plant equipment, and additional emphasis on the collection of adequate rentals. However, DOD has requested that OEP meet with us for the purpose of reaching an acceptable solution on this point, on the question of defining **"25 percent non-government use,"** and the differentiation of OEP approvals from local

COMMENT #3 CONTINUED

monthly approvals for rental purposes. Also, as mentioned in our comment #1, we are studying the practicality of maintaining utilization records on a machine-by-machine basis for selected high value items of IPE.

4. RECOMMENDATION: Accordingly, we are recommending that the Secretary of Defense, in connection with further consideration of a current DOD proposal for revision of the rental base, consider the determination, for rental purposes, of actual machine use on a machine-by-machine basis. Since it appears to us that the proposed method which is under consideration by DOD would be exceedingly complex to administer, particularly as to the effect of contract changes, we are also recommending consideration of this matter if not previously considered by the Department. (Deleted)

COMMENT:

Several alternative proposals are being considered by the ASPR Committee concerning conditions for use of Government plant equipment. None of these alternatives contemplate a determination of actual equipment use on a machine-by-machine basis. Our position regarding controls on a machine-by-machine basis is stated in the response to recommendations #1 and 3.

5. RECOMMENDATION: We are recommending that, in order to improve control over the use of Government IPE, the Department consider the need for more stringent language in the present ASPR clause. (Deleted)

COMMENT:

DOD has continuously taken the position that contractors should be held liable for any unauthorized use of IPE. However, we will consider the need for stronger language in paragraph (e) of the "use and charges" clause (ASPR 7-702.12) to assure adequate control over the use of Government-owned IPE in possession of Defense contractors.

APPENDIX II

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6. RECOMMENDATION: We are recommending, therefore, that DOD re-examine its current policy of not authorizing rent-free use of Air Force heavy presses used on Government work, and that priority effort be applied to increasing the Government's return through rental arrangements. (Deleted)

COMMENT :

The Air Force heavy press program, a unique situation because of the high cost of the presses, required special OEP approval on all leases. It continues to receive special emphasis. DOD, in conjunction with the Air Force, is re-examining existing arrangements pertaining to rental charges for use of these presses. We are considering such aspects as waiving the rental charges for Government work, increasing rental returns on commercial use, and the feasibility of selling some of the presses to Defense contractors.

7. RECOMMENDATION: We are therefore recommending that the DOD place concentrated efforts on the revision and administration of the following aspects of its industrial facility modernization and replacement program: (1) inclusion in procedures of a requirement for specific consideration, and a statement, as to the contractor's ability or willingness to privately finance modernization proposals, (2) consideration of a revision of guidelines to make the provision of Government-furnished plant equipment more directly related to new, major defense programs, (3) a re-examination of the principle of recovery of savings through repricing of incentive-type contracts and subcontracts, and (4) improvement of the validity and review of justification and actual experience data, with particular attention to the aspect of commercial use. (Deleted)

COMMENT :

It is DOD policy (DOD Directive 4275.5, Industrial Facility Expansion and Replacement) that the contractor be encouraged to replace old, inefficient government tools with more modern, efficient, privately owned tools. We will modify our current procedures to require specific consideration, and a statement, as to the contractor's inability or unwillingness to finance equipment modernization.

We will review the need to revise our guidelines as they apply to both new, and existing, major Defense programs. However, we feel that the problems

COMMENT #7 CONTINUED

highlighted in the GAO report stem primarily from administration of the modernization program, not inadequate guidelines. These deficiencies will be corrected through a program to improve the technical competency of our property administrators, by a more detailed evaluation of the validity and review of justification and experience data at the local level, and by a requirement for workload projections far enough in the future to allow for administrative and procurement lead time.

The ASPR Committee has had under consideration for some time the subject of recovery of savings under all types of contracts. The views contained in your letter of 30 March 1967 on recovery of savings in the repricing of incentive-type contracts are being considered by the committee.

8. RECOMMENDATION: We are recommending that contracting practices and ASPR provisions be studied, with the objective of providing a method for appropriately accumulating, recording and reporting transportation and installation costs which are borne by the Government. (Deleted)

COMMENT :

We agree that, as a general principle, the cost of plant equipment should include the cost of transportation for delivery to the current installation site, including the cost of installation. In order to comply with ASPR 7-702.12, it is necessary that cost of plant equipment include the costs of transportation to, and installation in, the present location of plant equipment in Defense contractors' plants for the purpose of charges for use of the equipment. Action will be taken to assure compliance with this requirement by amending ASPR after study of the most feasible way of obtaining equitable cost data, by accounting or statistical methods.

APPENDIX II

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9. RECOMMENDATION: We are therefore recommending that a study be made of methods by which DIPEC records could be used for Navy property management purposes, with the objective of eliminating duplicate recordkeeping by the Navy; and that the Department of Defense investigate the possibility of similar duplications in the other military services (Deleted)

COMMENT :

Duplicate recordkeeping related to Navy-owned IPE in possession of contractors is being discontinued. The requirement for records will be satisfied by reliance upon both the contractor and DIPEC property records.

ASPR (Appendices B and C) is being revised to prevent duplication of property records in all Defense agencies. If other duplication is found in the Military Departments, corrective action will be initiated.

10. RECOMMENDATION: We are therefore recommending that the Secretary of Defense establish a study project to determine the procedures to be used and the point in the contracting process at which financial control of special tooling should be established. Further, we are recommending that an appropriate section of ASPK be revised to require that proper internal control procedures be employed in the taking of physical inventories which would include appropriate segregation of duties of participating personnel. (Deleted)

COMMENT :

Based upon prior experience of both the Military Departments and commercial industry, special tooling has been and should continue to be considered as expendable (consumable) property. The provision of detailing in each contract the special tooling required to produce end items under the contract is considered an adequate basis of control. Normally, special tooling is produced solely for a particular process or machine. Upon determination by the contracting officer that this special tooling is no longer required by the Government, it should be disposed of in accordance with ASPR, Section VIII, Part 2. Therefore, we plan no change to the special tooling provision currently in ASPR.

COMMENT #10 CONTINUED

DOD concurs with the recommendation that we require proper internal control procedures, which include segregation of duties of responsible contractor personnel taking physical inventories of Government property. We will further review the desirability of an ASPR revision (Appendices B and C) in this regard.

11. RECOMMENDATION: Accordingly, we are recommending to the DOD that the ASPR be changed to require (1) financial accounting controls for Government-owned material in the possession of contractors in order to assure adequate control and safeguarding of the assets and also reliable reporting of the amounts on hand, and (2) that proper internal control procedures be employed in the taking of physical inventories which would include appropriate segregation of duties of participating personnel. (Deleted)

COMMENT:

Financial controls for material have been the subject of study for many years in COD. These studies are being continued. In addition, a proposal will be submitted for consideration by the ASPR Committee for criteria to establish contractor requirements for accounting for contractor-acquired Government material.

DOD is currently revising its procedures to exclude from the previous definition of Government-furnished material those items sent to contractors for processing and return. Accounting for these items will be performed by the cognizant inventory control point or other activity of the DOD component in both quantitative and monetary terms. While the contractor will be required to keep item records for scheduling purposes, he will be relieved of financial property accounting

12. RECOMMENDATION. We are recommending that the Department increase management efforts to ensure compliance of ASPR requirements with regard to control of property by DIPEC. We are also recommending that the

APPENDIX II

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RECOMMENDATION #12 CONTINUED

ASPR be revised to (1) require financial accounting control of Government owned industrial plant equipment **(Deleted)** and special test equipment at nonprofit institutions, (2) provide more specific criteria regarding "controlled" equipment which is not to be transferred to universities, particularly with respect to its application to industrial production equipment controlled by DIPEC, and (3) require proper internal control procedures in the taking of physical inventories, which would include appropriate segregation of duties of participating personnel. **(Deleted)**

COMMENT:

Paragraph C211.6, Appendix C, Manual for Control of Government Property in Possession of Nonprofit Research and Development Contractors, requires colleges and universities to maintain financial accounts for Government-owned real property and plant equipment. We agree that there has been a failure to exercise compliance with this requirement. We will take the necessary steps to assure compliance.

We question the advisability of requiring financial accounting for **(Deleted)** special test equipment provided non-profit contractors. It is DOD policy to charge **(Deleted)** special test equipment for use on the initial contract as an operating cost. As mentioned in our comment to recommendation #10, we feel it is not desirable to require financial accounting for **(Deleted)** special test equipment.

We agree that **industrial** plant equipment costing over \$1,000 a unit, at colleges and universities, should be reported to DIPEC for management and control purposes. Also, available equipment of this type should be screened for utilization prior to donation to the nonprofit contractor under provisions of 42 U.S.C. 1892. A revision to DSA regulations and ASPR designed to meet this objective, will be processed.

13. RECOMMENDATION: We are recommending that the DOD (1) place continuing emphasis on efforts to upgrade and improve the quality of property administrators and thus the effectiveness of their surveillance over Government-owned property in the possession of contractors, (2) consider what appropriate incentives should be provided to encourage the establishment and maintenance, by contractors, of an approved system for control over Government-owned property, and (3) initiate an effective program of internal audit of property administration. (Deleted)

COMMENT:

DOD has established a joint study project to evaluate current position classification standards for property administrators (GS-1103), establish position guidelines supplementing those of the Civil Service Commission, and provide qualification and performance standards. We consider this project of utmost importance. You may be assured that it will receive our close attention.

Under current ASPR procedures the contractor is required to establish and maintain an approved system for accounting and control of Government-owned property. We believe a specific ASPR (Appendices B and C) requirement for annual review of the contractors property accounting system is needed. The ASPR committee is considering adoption of such a requirement for both commercial and Non-profit contractors. Motivation should not be in the form of an incentive or an award to accomplish a task otherwise required by the contract and sound industrial practice.

We concur that there should be additional emphasis on the audit of controls over, and utilization of, Government property in the possession of contractors. As noted in the GAO report, ASD(C) memorandum of December 27, 1966, to the Assistant Secretaries of the Military Departments (FM), the Director, Defense Contract Audit Agency, and the Comptroller, DSA, established areas of audit:

COMMENT #13 CONTINUED

responsibility for both contract and internal auditors in Government property audits. Collaterally, the memorandum established procedures for assist audits as appropriate by either contract or internal auditors. **This** policy guidance, together with the internal audits scheduled or planned by the internal audit agencies of the Military Departments and DSA, should achieve the audit coverage contemplated by part three of the GAO recommendation.

14. RECOMMENDATION: We are recommending, therefore, that the new ASPR section, which defines the duties and responsibilities of Government property administrators, incorporate a policy statement to this effect for the guidance of such officials. **(Deleted)**

COMMENT :-

DOD agrees it is reasonable to expect that those accounting principles and standards applicable to Government-owned property in possession of contractors should be equivalent to those applied in normal industrial practices. The new ASPR supplement, covering the duties and responsibilities of the property administrator, will be amended to require acceptable accounting principles and standards commensurate with that of sound industrial practices. If more exacting standards than sound industrial practices are necessary, the requirement will be established by contract provision.

SEPARATE COMMENT:

The GAO pointed out in its report that guidelines should be included in ASPR for determining when to capitalize or expense costs incurred on Government real property in possession of Defense contractors. **(Deleted)** DOD will develop necessary criteria For capitalizing or expensing costs incurred on Government real property in possession of Defense contractors for inclusion in ASPR.

PRINCIPAL OFFICIALS
OF THE DEPARTMENT OF DEFENSE, THE MILITARY DEPARTMENTS
AND THE OFFICE OF EMERGENCY PLANNING
RESPONSIBLE FOR THE ADMINISTRATION OF ACTIVITIES
DISCUSSED IN THIS REPORT

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
<u>DEPARTMENT OF DEFENSE</u>		
SECRETARY OF DEFENSE: Robert S. McNamara	Jan. 1961	Present
DEPUTY SECRETARY OF DEFENSE: Paul H. Nitze	July 1967	Present
Cyrus R. Vance	Jan. 1964	June 1967
Roswell L. Gilpatric	Jan. 1961	Jan. 1964
ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER) : Robert N. Anthony	Sept. 1965	Present
Charles J. Hitch	Feb. 1961	Aug. 1965
ASSISTANT SECRETARY OF DEFENSE (INSTALLATIONS AND LOGISTICS): Thomas D. Morris	Sept. 1967	Present
Paul R. Ignatius	Dec. 1964	June 1967
Thomas D. Morris	Jan. 1961	Dec. 1964
DEPUTY COMPTROLLER FOR AUDIT SYSTEMS: K. K. Kilgore	Feb. 1963	Present

DEPARTMENT OF THE ARMY

SECRETARY OF THE ARMY: Stanley R. Resor	July 1965	Present
Stephen Ailes	Jan. 1964	July 1965
Cyrus R. Vance	July 1962	Jan. 1964
UNDER SECRETARY OF THE ARMY: David E. McGiffert	Nov. 1965	Present
Stanley R. Resor	Apr. 1965	July 1965
Paul R. Ignatius	Mar. 1964	Dec. 1964
Stephen Ailes	Feb. 1961	Jan. 1964

PRINCIPAL OFFICIALS
OF THE DEPARTMENT OF DEFENSE, THE MILITARY DEPARTMENTS
AND THE OFFICE OF EMERGENCY PLANNING
RESPONSIBLE FOR THE ADMINISTRATION OF ACTIVITIES
DISCUSSED IN THIS REPORT (continued)

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
<u>DEPARTMENT OF THE ARMY</u> (continued)		
ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS AND LOGISTICS) :		
Dr. Robert A. Brooks	Oct. 1965	Present
Daniel M. Luevano	July 1964	Oct. 1965
A. Tyler Port (acting)	Mar. 1964	June 1964
Paul R. Ignatius	May 1961	Feb. 1964
CHIEF OF STAFF:		
General Harold K. Johnson	July 1964	Present
General Earle G. Wheeler	Oct. 1962	June 1964
CHIEF, U.S. ARMY AUDIT AGENCY:		
Major General H. G. Sparrow	Mar. 1967	Present
Major General P. F. Lindeman	Apr. 1966	Feb. 1967
Major General T. Sands	Mar. 1965	Feb. 1966
Major General S. Jones	Apr. 1961	Feb. 1965
<u>DEPARTMENT OF THE NAVY</u>		
SECRETARY OF THE NAVY:		
Paul R. Ignatius	Aug. 1967	Present
Paul H. Nitze	Nov. 1963	June 1967
UNDER SECRETARY OF THE NAVY:		
Charles F. Baird	July 1967	Present
Robert H. B. Baldwin	July 1965	June 1967
Kenneth E. BeLieu	Feb. 1965	July 1965
Paul B. Fay, Jr.	Feb. 1961	Jan. 1965
ASSISTANT SECRETARY OF THE NAVY (INSTALLATIONS AND LOGISTICS) :		
Graeme C. Bannerman	Feb. 1965	Present
Kenneth E. BeLieu	Feb. 1961	Feb. 1965

PRINCIPAL OFFICIALS
OF THE DEPARTMENT OF DEFENSE, THE MILITARY DEPARTMENTS
AND THE OFFICE OF EMERGENCY PLANNING
RESPONSIBLE FOR THE ADMINISTRATION OF ACTIVITIES
DISCUSSED IN THIS REPORT (continued)

		<u>Tenure of office</u>	
		<u>From</u>	<u>To</u>
<u>DEPARTMENT OF THE NAVY</u> (continued)			
CHIEF OF NAVAL MATERIAL:			
Vice Admiral Ignatius J. Galantin	Mar. 1965	Present	
Vice Admiral William A. Schoech	July 1963	Mar. 1965	
AUDITOR GENERAL:			
Captain E. K. Auerbach	Oct. 1965	Present	
Captain P. Nicks	Sept. 1965	Oct. 1965	
Captain C. M. Grassino	Feb. 1965	Aug. 1965	
Rear Admiral E. Stanley	Nov. 1962	Feb. 1965	
<u>DEPARTMENT OF THE AIR FORCE</u>			
SECRETARY OF THE AIR FORCE:			
Dr. Harold Brown	Oct. 1965	Present	
Eugene M. Zuckert	Jan. 1961	Oct. 1965	
UNDER SECRETARY OF THE AIR FORCE:			
Townsend Hoopes	Oct. 1967	Present	
Norman S. Paul	Oct. 1965	Sept. 1967	
Dr. Brockway McMillan	June 1963	Sept. 1965	
ASSISTANT SECRETARY OF THE AIR FORCE (INSTALLATIONS AND LOGISTICS) (formerly materiel) :			
Robert H. Charles	Nov. 1963	Present	
CHIEF OF STAFF:			
General John P. McConnell	Feb. 1965	Present	
General Curtis E. LeMay	July 1961	Jan. 1965	
AUDITOR GENERAL :			
Major General Don Coupland	Sept. 1964	Present	
Major General W. W. Veal	Aug. 1963	July 1964	

PRINCIPAL OFFICIALS
OF THE DEPARTMENT OF DEFENSE, THE MILITARY DEPARTMENTS
AND THE OFFICE OF EMERGENCY PLANNING
RESPONSIBLE FOR THE ADMINISTRATION OF ACTIVITIES
DISCUSSED IN THIS REPORT (continued)

		<u>Tenure of office</u>	
		<u>From</u>	<u>To</u>
<u>DEFENSE CONTRACT AUDIT AGENCY</u>			
DIRECTOR :			
William B. Petty	July 1965	Present	
<u>DEFENSE SUPPLY AGENCY</u>			
DIRECTOR :			
Lieutenant General E. C. Hedlund, USAF	July 1967	Present	
Vice Admiral Joseph M. Lyle, USN	July 1964	June 1967	
DEPUTY DIRECTOR :			
Major General W. W. Vaughn, USA	July 1967	Present	
Major General E. C. Hedlund, USAF	Aug. 1966	June 1967	
Major General F. C. Gideon, USAF	July 1964	July 1966	
DEPUTY DIRECTOR FOR CONTRACT ADMINISTRATION SERVICES:			
Major General John A. Goshorn, USA	Aug. 1966	Present	
Major General W. W. Veal, USAF	July 1964	July 1966	
COMMANDER, DEFENSE INDUSTRIAL PLANT EQUIPMENT CENTER :			
Colonel F. Sitler, USAF	Jan. 1966	Present	
Colonel F. Sitler, USAF (acting)	Oct. 1965	Jan. 1966	
Colonel S. F. Langley, USAF	Mar. 1963	Oct. 1965	
AUDITOR GENERAL :			
Burk O. Barker	Dec. 1961	Present	
<u>OFFICE OF EMERGENCY PLANNING</u> <u>EXECUTIVE OFFICE OF THE PRESIDENT</u>			
DIRECTOR :			
Price Daniel	Oct. 1967	Present	
Farris Bryant	Mar. 1966	Oct. 1967	

PRINCIPAL OFFICIALS
OF THE DEPARTMENT OF DEFENSE, THE **MILITARY** DEPARTMENTS
AND THE OFFICE OF EMERGENCY PLANNING
RESPONSIBLE **FOR** THE ADMINISTRATION OF ACTIVITIES
DISCUSSED IN THIS REPORT (continued)

		<u>Tenure of office</u>	
		<u>From</u>	<u>To</u>
<u>OFFICE OF EMERGENCY PLANNING</u>			
<u>EXECUTIVE OFFICE OF THE PRESIDENT</u> (continued)			
DIRECTOR (continued) :			
Franklin P. Dryden (acting)	Jan. 1966	Mar.	1966
Buford Ellington	Feb. 1965	Jan.	1966
Edward A. McDermott	Feb. 1962	Jan.	1965

APPROXIMATE COST OF GOVERNMENT-OWNED PROPERTY

AT CONTRACTORS' PLANTS INCLUDED IN OUR REVIEW

AS OF REPORTING DATES IN FISCAL YEAR 1966 (note a)

Principal type of contractor	Number visited	Plant cognizance	Facilities	
			IPE (note b)	AF heavy presses (note c)
Ordnance	2 ^e	DCAS	\$ 28,333,700	\$ 34,030,600
Electronics	1	Army	10,720,200	-
	1	Navy	360,600	-
Aircraft engine	4	DCAS	101,160,100	-
Airframe	5	DCAS	18,055,900	-
	1	Air Force	33,384,100	-
	1	Navy	3,718,400	-
Heavy press	<u>2</u>	DCAS	<u>-</u>	<u>74,220,800</u>
Total--manufacturing plants	17		195,733,000	108,251,400
Nonprofit (universities)	<u>2</u>	ONR	<u>4,149,600³</u>	<u>-</u>
Total--all contractors	<u>19</u>		<u>\$199,882,600</u>	<u>\$108,251,400</u>

^aWe also visited four contractor locations where we did not collect comparable financial data for Government-owned property in their possession. At these locations we restricted our examination to the DOD Industrial Equipment Modernization and Replacement Program.

^bPrimarily metalworking machine tools.

^cPresses and support equipment under the Air Force heavy press program.

^dMilitary property consists of military personal property, such as trucks, radar equipment, and aircraft.

^eIncludes one heavy press operator who is also an ordnance manufacturer.

^fNot readily determinable.

^gPrimarily test vans and test chambers.

^hPrimarily scientific equipment and furniture and fixtures.

ⁱIncludes tooling at subcontractor locations.

^jIncludes synchrocyclotron costing \$2.4 million. Remaining items at universities refer primarily to electronic test equipment, both general purpose and specialized.

APPENDIX III

<u>Facilities</u>					
<u>Real property and improvements</u>	<u>Minor and other property</u>	<u>Materials</u>	<u>Tooling and test equipment</u>	<u>Military property (note d)</u>	<u>Total</u>
\$ 5,763,800	\$ 1,433,100	\$ 2,247,000	\$ 8,567,300	\$ 84,700	\$ 80,460,200
3,649,200	4,034,200 ^g	(f)	20,333,700	275,700	39,013,000
117,800	9,658,900 ^g	7,871,200	19,237,500	-	37,246,000
1,202,400	3,396,800	16,276,200	84,105,900	-	206,141,400
-	548,100	5,653,400	26,293,100	2,252,100	52,802,600
73,416,600	23,949,000 ^h	20,554,600	185,093,900 ⁱ	26,549,900	362,948,100
-	1,951,700	45,636,700	4,107,200	-	55,414,000
<u>31,488,400</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>105,709,200</u>
115,638,200	44,971,800	98,239,100	347,738,600	29,162,400	939,734,500
<u>107,800</u>	<u>416,600</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>4,674,000</u>
<u>\$115,746,000</u>	<u>\$45,388,400</u>	<u>\$98,239,100</u>	<u>\$347,738,600</u>	<u>\$29,162,400</u>	<u>\$944,408,500</u>